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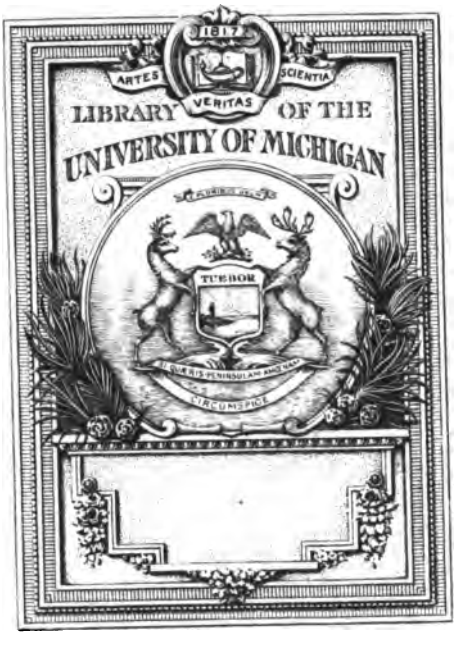

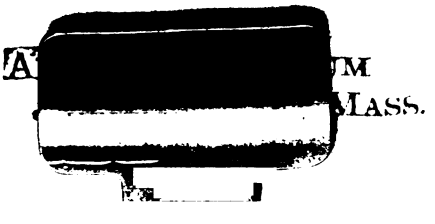

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UNIV. OF MICH.

Anemone-flowered Chrysanthemum, Lady Margaret. *Frontispiece.*

THE CHRYSANTHEMUM

ITS

HISTORY, CULTURE, CLASSIFICATION, AND NOMENCLATURE.

BY

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SECOND EDITION.

LONDON:
"THE GARDEN" OFFICE, 37, SOUTHAMPTON STREET,
COVENT GARDEN.

1885.

WYMAN AND SONS, PRINTERS,
GREAT QUEEN STREET, LINCOLN'S-INN FIELDS,
LONDON, W.C.

Bot. Gard - Gen. lib.
Arnold Arboretum
12-1-41
44369

PREFACE TO SECOND EDITION.

SINCE the first edition of this work was published great strides have been made in the improvement, cultivation, and exhibition of the flower which I had the honour to speak of years ago as our "autumn" or "winter queen." At first, as history shows us, Chrysanthemum growers were satisfied with imported Chinese varieties, then came in 1802 a few accidental sports, then, in or about the year 1829 or 1830, a few seedlings were raised in this country at Oxford and Norwich, and others were raised by M. Bernet at Toulouse. The late Mr. Salter did much to improve and popularise the plant, and the introduction of the even now famous Jersey and Guernsey seedlings received an impetus by the advent of the curiously frilled Japanese forms. Long before these weird varieties came, however, good old Samuel Broome had made the Chrysanthemum a popular town flower, and the exhibitions he inaugurated in the classical old Temple Gardens are still continued every year. Popular, however, as the Chrysanthemum may have been in times past, it is now more admired than ever, and on all hands local societies are arising whose special object is its culture and improvement. Around London such societies are almost too numerous, but they have collectively brought cultural excellence to a very high standard. One of the greatest steps in advance in recent times has been the formation of the National Chrysanthemum Society, which has done good and useful work since

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it was established a year or two ago, so that it now forms the final court of appeal in all matters relating to our favourite flower. A central body of experts is just now especially desirable when new varieties are appearing by the hundred every year, not only, as formerly, from the Channel Islands or the south of France, but from America and Japan. Even our English growers are also becoming active in their endeavours to rear varieties of merit from home-sowed seeds; Mr. Cullingford and Mr. Teesdale among others having been especially successful in this way, and no doubt the National Society will offer facilities to home growers of seedlings in future years. That this society has powers of affiliation is fortunate, and there seems no valid reason why their great central exhibitions should not absorb some, if not all, of the paltry little shows which but few ever go to see. If the National Society itself were to hold its exhibitions at South Kensington in connection with the Royal Horticultural Society, no doubt both would be benefited by such a mutual arrangement. Be this as it may, one thing is clear, viz., that we must have a well-organised Chrysanthemum conference and exhibition of plants and cut flowers. Either the National Chrysanthemum Society or the Royal Horticultural Society must take this matter in hand, and the result cannot fail to be of benefit to all concerned. Advanced as is our cultural knowledge of to-day, there are many things connected with the Chrysanthemum which we have to learn. There are many questions relating to nomenclature and classification which might be discussed with every advantage by experts in conclave assembled. Now is the time to do all this, for in a few years we shall be too late. Even now old landmarks are being swept away, and the question is whether in the future growers will not grow their Chrysanthemums from a good strain of seed as they now do their Primulas, Cinerarias, and Calceolarias. Be this as it may, the possibility of treating the Chrysanthemum as a common half-hardy

annual is possible in England, as well as in Southern Europe and America. During the last two or three years American growers have produced some fine decorative varieties, and their exhibitions are growing in importance every year. English growers have at last broken clear of all old rules and criterions as to what is or what is not a "good flower." We can nowadays recognise beauty of the highest types both in form and colour untrammelled by the old traditions of half globes or circles, and instead of following in each other's footsteps, each one of us may boldly strike out a path for himself, as Mr. Teesdale did when he gave us single-flowered kinds, and as Mr. John Thorpe has more recently done in America.

Amongst the novelties of last season none attracted more attention than Fabian de Mediana, Sœur Dorothée Souille, and one or two others belonging to what we now call the Japanese Anemone race or section. These have a raised cushion-like disc and long, semi-pendent or drooping guard florets. The crimson-red C. Cullingfordi is another example of what we may call the new departure from the old faith. Mr. Glenny's idea of Chrysanthemum beauty was this: "No matter what the construction, whichever flower makes up the closest half of a globe is the best flower, while those which are open and loose are the worst." To this he added the following decree: "The tasselled and quilled sorts are not showable except on the plant in collection."

Nowadays all this is altered, and anything new or beautiful is admired, and some of the open or loose-petalled Japanese and American seedlings are as fine as anything well can be in the world of graceful flowers. To obtain plenty of fine flowers, feed the plants with liquid manure, guano, or sulphate of ammonia, and to get a successional blooming, cut down a few plants from the end of May until the middle of July.

I have only one word more to say, and that is on arranging these flowers as indoor ornaments. When well arranged, nothing can be more pleasing in their season. As grown in

bush form for conservatory decoration, long spray-like stems bear many flowers. Do not cut little, skimpy bits of these, but the whole shoot, if needs be, 2 feet or more in length. Put a good branch or two of red-purple Mahonia leaves into a wide-mouthed bowl or vase, and place the Chrysanthemum stems in amongst these, so that each stands as free and as graceful as if on the plant. If you place too many kinds together, they do not look at their best. It is better to keep the colours in separate vases, or at most do not place more than two colours together. Chrysanthemums endure fresh and fair a long time, and if their pots are plunged in moss in an ornamental vase or bowl, they are very suitable for drawing-room or corridor decoration. We saw a plant of Elaine bearing two hundred flowers placed in a drawing-room last November just as its first buds expanded, and it was presentable six weeks afterwards. Of course no gas was used for lighting, and dead flowers were carefully snipped away every morning. To enjoy these flowers thoroughly you must bring them into the house or into vases near the eye, where every glint of colour and wayward twist of tassel and fringe can be seen.

F. W. B.

DUBLIN: 26 *October*, 1885.

PREFACE.

To cultivators of the "Autumn" or "Winter Queen," this little book on a now popular flower is offered with all a Chrysanthemum grower's sympathy. Our favourite flower is everywhere at home; even the cottage wall or porch may possess a little of the beauty it reflects from the conservatories of the rich, since of all flowers this one seems to be most amenable to the cultural care of rich and poor alike. It is the only hardy flower which can brave the November fogs of our metropolis, and "gild the shadows of a waning year" with its blossoms. No other late autumnal flowering plant is so useful, none other so grateful for the shelter of a glass roof, a window-pane even, and its flowers seem the caresses of a dying year. Their beauty is all the more appreciated because tinged with a shade of sadness, and because they come to us as the last sheaf of a whole year's flower harvest. And when they leave us we are not without hope for the floral offerings of a happy new year.

F. W. B.

SUMMARY OF CONTENTS.

	PAGE
PREFACE	
INTRODUCTION	9
HISTORY OF THE CHRYSANTHEMUM	11
CLASSIFICATION AND NOMENCLATURE	18
RACES OR SECTIONS	21
CULTURE	29
WATERING...	37
STOPPING AND DISBUDDING	38
CHRYSANTHEMUMS FOR SMALL GREENHOUSES	41
EARLY AND LATE FLOWERING CHRYSANTHEMUMS —	46
NEW SINGLE-FLOWERED CHRYSANTHEMUMS	48
DISEASES AND INSECTS...	50
LARGE SHOW BLOOMS	52
ON RAISING NEW CHRYSANTHEMUMS	55
CHRYSANTHEMUM SPORTS	58
CHRYSANTHEMUMS AS CUT FLOWERS	60
CHRYSANTHEMUMS FOR MARKET	61
SELECT CHRYSANTHEMUMS	63
THE BEST INCURVED, OR LARGE-FLOWERED CHRYSANTHEMUMS ...	64
NOTES ON FRENCH SEEDLINGS	66
NOTES ON AMERICAN SEEDLINGS	71
HINTS ON EXHIBITING	77
CHRYSANTHEMUM SOCIETIES	78
RULES OF THE CHRYSANTHEMUM SOCIETY	79
CALENDAR FOR MONTHLY OPERATIONS	85
GENERAL A B C LIST OF CHRYSANTHEMUMS	89
LIST OF SYNONYMS	137
GUERNSEY AND JERSEY SEEDLING CHRYSANTHEMUMS	70

THE GOLD FLOWER.

CHAPTER I.

INTRODUCTION.

The Chrysanthemum is, of all flowers, one of the most effective, and its many good qualities recommend it to cultivators of every grade. It is robust, hardy, easily increased by cuttings and seeds, varied in form, colour, and even in fragrance, and it blooms naturally at a season when other flowers are proverbially scarce. So strikingly effective are its blooms, that they are equally well suited for exhibition stands or as cut flowers for the drawing-room, and so also the plant is amenable to severe and formal training into "specimen" shape; or it may be, as we think, more wisely allowed to assume its natural habit of growth, and so become especially well suited for greenhouse and conservatory, or even room and window decoration. During the past year or two especial attention has been paid to the culture and selection of the early summer blooming, as also to the very late blooming, varieties of the Japanese and incurved types, so that now we may count on having Chrysanthemums in bloom from July until nearly the end of February, a period of at least seven months. We have but few other garden flowers so valuable for all purposes, and still fewer that may fairly be called an everybody's plant. It is well fitted for the cottage garden, for a sunny corner beside the porch, as for the marble-floored conservatory. Every cottager, every artisan may grow it to perfection with but little trouble or expense. Oh! that you men of Lancashire, born gardeners and florists by nature as you are, would but take up the Chrysanthemum in the same earnest spirit as that which prompted you to take up the Auricula, the Onion, and Leek, the big Gooseberry, and the Celery as objects worthy of your cultural devotion and skill. Would that "merry Sherwood" men ("Nottingham lambs," if you like) could be induced to make the Chrysanthemum their winter queen, even as they have long enthroned fair Rosa as their summer one. We look to the artisans of Coventry—the city of art weaving—and to the flower-loving people of Norwich; these are the men into whose hands we would fain trust our favourite. To say that the "flower of autumn" has a great future before it is but to repeat one of the most palpable truisms of our time, for the wonderful evolutionary power observable everywhere in gardens, as in Nature, is especially active at present in the case of this favourite flower. English cultivators have done more perhaps than any others in developing its floral beauty, but they have, of

late years at least, been quite behind in the rearing of new seedling varieties. Perhaps to some extent our climate may be one reason for this; and yet, what country of its size has such an extensive and variable glasshouse climate? and can it be possible that the cultivators who have wrought such cultural hybridising miracles will remain content with having as a rule failed in obtaining seed from the Chrysanthemum? We know for certain that seed has repeatedly been obtained in England, and that some of the earliest seedlings and bud-sports originated there! If so, how is it that what was possible to our forefathers is impossible to us now? But we shall take heart, since I see that Mr. Laxton, amongst others, has taken our favourite flower in hand, and all of us must believe in the axiom that "in the garden nothing is impossible." One fact is, however, established beyond any doubt, viz., that the Chrysanthemum is quite amenable to culture, both in this country, in France, in the Channel Islands, and in America, as a common half-hardy annual. Good imported seed is easily obtained from seedsmen, but as a matter of fact, seed of the best can only be obtained by English growers saving it from their own plants until a good race or strain has been secured. I am one of those who believe that the Chrysanthemum is as yet only in its infancy. We have up to the present been content to accept whatever the Continental raisers cared to send us from year to year. Certainly we must not forget Mr. Teesdale's Daisy-flowered kinds, and I hope growers will try to obtain seeds from these crossed with pollen of the double forms. Beautiful as the Chrysanthemum now is, there yet remains a wide field for improvement. The summer blooming or early-flowered section lacks size and form as yet, and vivid colour and fragrance may be still further increased even among the types which now possess these attributes in the highest degree. In some cases grafting weakly rooting kinds upon robust growers as stocks may be practised with advantage, and

THE QUESTION OF SEED-SAVING in our own climate is as yet far from being exhausted. Under good treatment the finest of home-saved seed may be produced in a properly constructed house fully exposed to sunshine. It is well known that Chrysanthemum seed has been harvested in England, and accomplished facts are certainly possible of being repeated. But of recent years our home growers have been too lethargic in the matter of seed-saving, and yet no other cultivators could possibly beat them in this field if a beginning be once made on proper and well defined lines. If we could but once induce people to raise seedlings as well as grow beautiful blooms, we should be on a fair road towards enhancing colour and probably emphasising that fragrance which a few kinds possess. We must not be too restricted in our ideas as to what are and what are not good kinds. Instead of trying to limit varieties to one or two standards of perfection, our object should rather be the extending of the boundary lines of variation. All tastes must be consulted. The florist or exhibition grower must have his Incurved, Anemone, Japanese, and Pompon varieties, but the artist must also have his bits of twisted fringe and glints of colour in tassel and frill of varied kinds. The botanist, too, must have structural peculiarities and forms of floret the most varied and distinct. Even the æsthetics must have their whims gratified

with single or Daisy-like blooms, for it is not wise to restrict our admiration to those kinds in which reduplication of florets is the rule, and it is in the direction of single-flowered kinds that we are likely to gain most in vivid colouring, beautiful alike for artistic and decorative uses. I am firmly convinced that if raisers of seedlings will but widen their sympathies, and not throw away their single-flowered seedlings, as they hitherto have done, we shall soon be surprised at the immense variety of type and form and colour which raisers may produce. We have hitherto worked in narrow grooves, and the immense capacity for variation of which the Chrysanthemum is possessed has as yet been scarcely dreamed of, even by those of us who are most sanguine. As tending towards the desired increase in that direction, which in this, as in other cases, may become most charming, I most earnestly counsel all growers of the Chrysanthemum to raise a few seedlings every year, even if it be from imported seeds. The raising of seedlings is said to be the "poetry of gardening," and if this be so, then it was never more true than in the case of the popular flower now under notice. But the heyday of all that beauty and variety of which the Chrysanthemum is by nature and art capable will, I feel persuaded, only come to us as the result of patience and labour in the growth and culture of the produce of home-saved seeds — the results of our own ideas and desires rather than in the growth of plants from seeds saved abroad, as is now supposed to be best. Another important point as regards seed-saving, and one on which too much stress cannot well be laid, is that cross-fertilisation has been but rarely resorted to, too much reliance having hitherto been placed upon inherent tendency towards natural variation.

CHAPTER II.

HISTORY OF THE CHRYSANTHEMUM.

Of all flowers that which has been said to represent "cheerfulness under adversity"—the Chrysanthemum, or "Golden Flower" of the Greek—may fairly be called the "queen of autumn," six varieties of which were described by Breynius as being cultivated in Holland two centuries ago. Originally introduced to England from the Celestial Empire in 1754, it seems first to have been cultivated by that celebrated gardener, Miller, of Chelsea, but was soon afterwards lost by some unfortunate accident. Again introduced, this time by way of Marseilles in 1789, it reached London in 1795, and in Curtis's "Botanical Magazine" for 1796 we find a coloured figure of Chrysanthemum sinense (there described under the name of C. indicum),*

* The figure in the "Botanical Magazine," vol. x., t. 327, represents a double bloom, with quilled florets of a maroon-purple colour inside, and of a

the result of the second advent. Phillips, in his "Flora Historica," published in 1824, tells us that the new plant was sold at a high price soon after its introduction, but that it was not until the beginning of the nineteenth century that it attracted attention as a florist's flower. "Then," says he, "like the Roses of China, Chrysanthemums soon escaped from the conservatories of the curious, and as rapidly spread themselves over every part of the island, filling the windows of the cottagers and the parterres of the opulent with their autumnal beauties, that now vie with the China Aster in variety of colour glory."

Amongst other peculiar modes of culture resorted to by Chinese gardeners in Chrysanthemum culture is the engrafting of cuttings on to a strong-growing species of Artemisia (A. indica) as a stock. The idea of grafting is suggestive, as some of the more delicate rooting kinds might be grown by being grafted or inarched upon rooted cuttings or sucker stocks of a robust, strong-rooting character. Some may think this idea impracticable, but I know that Chinese gardeners rarely take any special trouble in plant culture without a sound reason for so doing, and cultivators at home will, I hope, leave "no stone unturned" in this respect. One reason why grafting might be useful is that by its means new sports might in all probability be obtained. Fortune tells us of the beauty of the Chrysanthemum in oriental gardens, and how banks of the gorgeous blooms are illuminated at night with lanterns, and how that even gigantic effigies are made up entirely of their lovely flowers.

Even when the Chinese emigrate to other lands, this their favourite flower is carried with them and affectionately cultivated. Here is an instance of this practice. I once went to see the late Consul Whampoa's garden at Singapore,* the entrance to which is a long bower of the most superb tropical flowers, waving crimson-stemmed Palms, and climbing plants of great beauty. Here the "Sacred Tree of Heaven," Amherstia nobilis, bends under the weight of umbrageous leafage and pendent wreaths of the most gorgeous crimson and golden blossoms. Every pool and stream, of which there are many in this garden, are filled with the rarest of Water Lilies and Lotus flowers. After our host had shown us all this—all the tropical treasures of Kew or Glasnevin in the open air and sunshine—he led us triumphantly to a little sheltered spot and showed us, with pleasure beaming from every wrinkle of his smoothly shaven face, not Orchids of curious structures, nor Water Lily of a loveliness divine—neither Palm, nor Fern of filmy beauty—nothing more nor less than a bed of Chrysanthemums, the one flower of his heart, reminding him of home and country. That the artists and poets of China and Japan have lavished much of their finest and best thought and labour in representing this flower in all pleasant aspects to the senses is now a matter of history, attested by ceramic wares and textile fabrics of many kinds. The Japanese more especially possess voluminous illustrated works in

silvery or rose-purple outside. Dr. Sharpe reflexed variety very closely resembles this figure in all ways. It is in reality the Chinese Chrysanthemum (C. sinense), and not C. indicum, which is the type of the Pompon or small-flowered race.

* Mr. Whampoa was a Chinese trader, who early in life left China and settled in Singapore. He rose to affluence, and was a C.M.G.

which the Chrysanthemum, in all its phases of race and colour, is ably pourtrayed. The Rev. G. Henslow has well described how

THE TRANSFORMATIONS IN THE COROLLA are brought about—the two principles of hypertrophy and atrophy both conspiring to effect the remarkable changes. Thus, while the corolla enlarges, to change from a five-toothed minute disc-floret into a broad, flat-petalled ray-floret, two petals are gradually dwarfed and finally disappear; while a corresponding atrophy takes place in the essential organs, for the stamens are totally arrested, and the pistil changes its form, the style-arms becoming much reduced in size. The tubular condition of the corolla may remain while the tube itself elongates without any or much splitting—hence the quilled and tasselled forms are arrived at, both representing a more or less arrested stage in the process of change into ray-florets. The ligulate petal may be broad—which gives rise to the incurved and recurved ball-like forms; or it may be greatly elongated and narrow—whence the Japanese linear-petalled forms; or it may be expanded at the mouth and the teeth multiplied—which gives the trumpet-like so-called Dragon Chrysanthemum. Lastly, if the disc-florets enlarge, but remain more or less tubular while the ray retains its distinctive character, the Anemone form is secured.

THE FIRST CHRYSANTHEMUM that ever flowered in England bloomed in Colville's nursery, in the King's Road, Chelsea, in 1795, the plant having been obtained originally from M. Cels, the celebrated nurseryman of Paris. At this time, and for some little time afterwards, botanists had a contest as to its botanical position; some of them contended that it was one of the Camomiles (Anthemis), whilst others declared that it was unmistakably a Pyrethrum or Feverfew, but at last it was decided that it should be called Chrysanthemum, from chrysos, gold or golden, and anthos, a flower. Sabine, who was secretary to the Horticultural Society at the beginning of the present century, says, however, that Chrysanthemums had been grown in Holland nearly as far back as the year 1688; but, singular to say, in 1821 no gardener in Holland knew anything of them. In 1808 their cultivation had increased to some nine or ten varieties, and it went on increasing, many varieties being collected for the Royal Horticultural Society in China and Bengal in 1821 by Mr. Parks. At the end of 1825 the number of varieties seems to have been increased to 48, and in 1826 Sabine writes most cheerily concerning their rapid progress, and of an astounding large exhibition of them being held in the society's gardens at Chiswick, in which were shown over 700 plants in pots. Mr. Cannell tells us that the first public Chrysanthemum show in England was held at Norwich in the year 1830, and the names of the varieties exhibited were: Tasselled Yellow, Clustered Pink, Yellow Cluster, Silver White, Yellow Flame, Early Blush, Changeable Pale Buff, Large Lilac, and Golden Yellow.

THE FIRST SPORT from the original variety was noted in 1802, in which year Mr. Colville, of Chelsea, sent to Chiswick a pale pink variety, which had sprung from a sort called Changeable Buff. It is curious to note names given to some of the varieties about this time. Let one or two be given for curiosity's sake: Early Blush, Park's Small Yellow, Blush Ranunculus, Curled Blush, Tasselled Lilac, Two-

coloured Red, Double White Indian, Yellow Indian, Waratah, Quilled Pink, Pale Purple. These names, which in a sense give the characteristic of some of them, seem to indicate that in what are now called the show varieties, which are largely of the strain of Chrysanthemum sinense, there was the same special singularities as are to be seen now, only that these idiosyncracies are positively classified. We often hear of incurved flowers, of recurved or reflexed flowers, of quilled flowers, of tasselled flowers, and of Anemone flowers, besides the Pompons and Japanese. Well, the incurved flowers are those whose flat florets curve or bend in towards the centre of the bloom; the recurved or reflexed bend backward from the centre (the recurved moderately, the reflexed more so); the quilled have the edges of their florets involute and coherent, so that they look like small pipes or tubes; the tasselled are the loose, long, and flat-petalled flowers not coming under the other definitions; and the Anemone flowers are those kinds having a cushion-like centre of tubular disc-florets, surrounded by a ray of flat or strap-shaped florets of the usual kind.

Origin of the Pompons.—In 1845 the late Mr. Robert Fortune, who was sent to China in 1842 by the Royal Horticultural Society, brought home with him from Chusan (an island on the east coast of China) a semi-double reddish or light brown small Chrysanthemum, which was called the Chusan Daisy. The Horticultural Society propagated it, and sent it out amongst its members. From some of these members it was sent to M. Lebois, a perfect enthusiast in Chrysanthemum growing, in Paris. He seeded it, the autumns of France being more favourable to that operation than the cold foggy ones of England, and from this seed he raised a great many good varieties, which got into the hands of Mr. Salter, late of the Versailles Nurseries, Hammersmith, who in his day did more to popularise Chrysanthemums in England than any other man. Some of the best varieties, not only of Pompons, but of the other larger varieties, were introduced by him. He had a perfect knowledge of what was being done by the French growers, and generally secured their best seedlings. This is the generally received history of the Pompon varieties of Chrysanthemum, though we may infer from some of the names given to them as far back as 1821 and 1825, Park's Small Yellow, Blush Ranunculus, &c., for instance, that there were small varieties grown then; indeed, in the Horticultural Society's Transactions for February, 1821, there are coloured plates of small, many-petalled varieties, though they were not called Pompons until the French got hold of them in 1845–6. In 1846 a new era commenced in the history of the Chrysanthemum, for at that time Mr. Fortune brought from China two small-flowering varieties, the "Chusan Daisy" just named and "Chinese minimum." Although Mr. Fortune admired them in Chusan, they were considered too small and insignificant for English tastes. The French opinion of them was far different, for immediately upon their introduction, in 1847, into the already well-known collection at Versailles, the little "Chusan Daisy" became a favourite. From these two varieties have sprung all the Pompons now in cultivation. The French growers gave them this name, Pompon, from the

Single-flowered hardy Chrysanthemum (C. maximum).

resemblance of the flower to the tuft or pompon on the soldiers' caps.

JAPANESE KINDS.—These were brought over by Mr. Fortune on a second visit to Japan about the year 1859 or 1860. The precise date is uncertain, but at least one variety was figured in the *Botanical Magazine* as somewhat of a novelty in 1863, so it must be about the time mentioned that they were introduced. The French and Guernsey growers soon got hold of them, and have improved them immensely. They are with some growers greater favourites than either of the other two older varieties. In 1862 Mr. Salter introduced several Japanese varieties, some of which were spotted and striped; others were of fantastic forms called Dragons, and one, laciniatum, was a beautifully fringed white flower, and invaluable for bouquets, having the appearance of a Japanese Pink rather than of a Chrysanthemum. One had petals like long thick hairs of a red colour, but tipped with yellow, looking like the fringe of a shawl or curtain; another had broad white petals striped with red, like a Carnation or Camellia, whilst others were remarkable for their great size and brilliant colouring. Notwithstanding the improvements effected in the Japanese kinds by French and Channel Island raisers during the past twenty years, some of our nursery growers have during the present year gone back to first principles by the importation of some of the best varieties now obtainable in Japan.

SHOW CHRYSANTHEMUMS. — In 1850 we find the Chrysanthemum taking rank as a winter exhibition plant at the meetings of the Caledonian Horticultural Society, which at that time held its shows in what is now the Royal Botanic Gardens, Inverleith. Here we are told that "Chrysanthemums were the principal flowers exhibited. The prizes for single clusters of twelve varieties were awarded to Mr. Young, gardener to Mrs. H. N. Ferguson, of Archerfield, who had Minerva, Duc de Nemours, General Morceau, Salter's Annie, Queen of Yellows, Princess Maria, Clustered Yellow, Queen Victoria, Comte de Rantzau, Bicolor, Queen, and Marquis; and to Mr. Mitchell, for Temple of Solomon, Princess Marie Antoinette, Celestial, Queen, Salter's Annie, and others. For the most dwarf and finest-flowered plants, the prize was awarded to Mr. A. Sleigh, gardener to the Lord Advocate, Lauriston Castle, the kinds being Bicolor, Queen, Mirabile, and David." I give the extract as it stands from the *Gardener's Magazine of Botany* (1850), as not only are the names of the varieties interesting, but also the custom which then was followed of showing the flowers in single clusters (*i.e.*, all the blossoms as produced on one stem) instead of single blossoms as now.

BRITISH KINDS.—So popular are the Chrysanthemums of China and Japan, that one almost forgets that there are other species. "Charity begins at home," and so we must not lose sight of the two Chrysanthemums of our own country commonly known as the Ox-eye Daisy (C. Leucanthemum) and the Corn Marigold (C. segetum). Who can say what the Ox-eye of our meadows would produce in a few years if it were cultivated from seed with a little of that faith and persistence so characteristic of the Chinese gardeners? Even our golden Corn Marigold has been neglected, although in its native state it is one of the brightest and best of all annual Composites. Its Algerian

relative (C. coronarium) has met a better fate, and we have now many varieties both single and double in our gardens. The same may be said of C. carinatum, which is likewise a very beautiful annual, although the Chinese use it as a pot herb, just as their Japanese cousins eat up the succulent bulbs of Lilium auratum, thinking more of their use than of their beauty. C. arcticum, C. speciosum, C. lacustre, and C. atratum are all well-known hardy species, the last named being a more noble and stately edition of the Ox-eye of our meadows. Of all the late-blooming, hardy herbaceous kinds, however, C. (Pyrethrum) serotinum, also known as C. uliginosum, is one of the most effective, producing its green-eyed stars in October or later, continuing in beauty until cut down by the early frosts of November. The shrubby C. frutescens, better known as the Marguerite or the Paris Daisy, has of late years become almost as great a favourite in English gardens as it has long been in those on the Continent. There are several varieties, C. tanacetifolium being one of the best white-rayed kinds, and C. Etoile d'Or, a seedling from C. Comte de Chambord, is the best of the sulphur-rayed varieties. All are beautiful planted out in the open borders in May, or as grown in pots in a sunny greenhouse. They bloom throughout the winter months, when their flowers are especially valuable. C. coronarium, C. carinatum, C. Burridgeanum, and other annual species are easily raised from seeds sown in spring like Mignonette, Stocks, or other hardy annuals. The herbaceous kinds, C. lacustre (syn., C. maximum), C. uliginosum, and others, are best increased by division in the spring or early summer months. C. frutescens and other allied sub-shrubby kinds are easily propagated from cuttings.

It is interesting to find that the Siamese have adopted the Chrysanthemum as their national emblem. Breynius in 1689 described it as Matricaria japonica maxima, from which name we may infer that the earliest known large-flowering kinds came originally from Japan, especially so as he speaks of yellow, white, blush, purple, rose, and crimson varieties. Linnæus in 1753 referred to two species, C. sinense, with large white flowers, and C. indicum, with very small yellow blossoms, both double and single.* The Dutch florists seem to have been the first to cultivate C. indicum (Pompon) which had found its way to Amboyna and Malabar. Rheede figures it as early as 1699. Kæmpfer noticed it in 1712, and Thunberg describes it (also as Matricaria) in 1784.

Mr. Fortune told us long ago that the Chinese made life-sized images of their blossoms, but who would suspect the "moon-faced celestial" of liquor? And yet we are told that "in China a liquor is distilled from the flowers of the Chrysanthemum, which is regarded as an elixir-vitæ, and in the Chinese pharmacopæa a powder of the flowers or florets dried is prescribed as a cure for drunkenness."

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* It is curious to note that single-flowered Pompons after having been lost sight of for over a century are again coming into favour. Of such is New Departure, as now grown by Messrs. Cannell, with white ray florets and a golden disc. (See *Garden*, Jan. 6, 1883, p. 8.)

CHAPTER III.

CLASSIFICATION AND NOMENCLATURE.

LARGE-FLOWERED CHRYSANTHEMUMS.—The credit of introducing the first living plants of the large-flowered or C. sinense race (1789) belong to M. Blanchard, an enterprising merchant of Marseilles. The consignment consisted of three varieties, white, violet, and purple, the latter only reaching him alive. This identical variety is so well figured in the *Botanical Magazine*, t. 327, that we have no doubts as to its identity. It was not the wild type, but one of the many semi-double forms at that time cultivated in Chinese gardens. This kind caused such a sensation, that Sir A. Hume and Mr. John Reeves, a tea buyer for the then opulent East India Company, turned their attention to introducing other of the Chinese varieties. These, according to Mr. Salter, were as follows: In 1798 the Rose and Buff-coloured varieties were introduced; in 1802 the Golden Yellow, Sulphur Yellow, and Quilled Pink; in 1806 the Spanish Brown; in 1808 Large Lilac and Quilled White; in 1816 the Tasselled White; 1817 the Superb White; 1819 the Red, Purple, and Flamed Yellow. In 1820 only twelve distinct varieties were known in England. In 1821, however, came the Paper White, Large Pale Purple, and Small Single Yellow; this last possibly may have been the one grown at Chelsea in 1764. In 1822 came the Early Crimson, a semi-double flower with open flat florets in size and form like Marigold, and one or two others. In 1824 Mr. Parks, a collector for the Royal Horticultural Society, sent home about twenty kinds—the Brown Purple, Blush Ranunculus, Curled Blush, Changeable Buff, Clustered Pink, Early Blush, Golden Lotus, Late-flowering Yellow, Pale Pink, Pale Buff, Parks' Yellow, Quilled Pale Orange, Starry Purple, Tasselled Yellow, Two-coloured Incurved, Two-coloured Red, Windsor Yellow, and Yellow Waratah, the first of the Anemone section, both ray and disc being yellow. In 1826 forty-eight varieties were growing in the Horticultural Gardens at Chiswick, only fifteen varieties being known in France in 1822.

In 1850 Mr. Salter tells us that the varieties usually seen on exhibition stands were: Annie Salter, Beauty, Bixio, Christine, Campistroni, Defiance, Duke, Golden Chester, Goliath, King, Lysias, Mad. Comerson, Mad. Poggi, Nonpareil, Orlando, Pearl, Pilot, Phidias, Princess Marie, Queen of England, Temple of Solomon, Vesta, and Two-coloured Incurved. Most of these were grown in 1865, but as numbers of growers increased great improvement took place, not only in England, but in France and the Channel Islands. In Guernsey, Messrs. Clark, Smith, Pethers, Wolsey, and Davis raised many good kinds, including Sir S. Carey, Abbé Passaglia, Beverley, General Bainbrigge, Lady Hardinge, Lady Slade, Prince Alfred, Novelty, Cherub, Little Harry, Rifleman, and many others. Mr. Ingram, of Frogmore, raised several good kinds, Pompon Little Gem, a late-flowering kind, being good in colour and form. Mr. Salter, writing in 1865, says that only six or seven of the varieties originally introduced

were then in cultivation, and only one Chinese name was retained, viz., Golden Lotus—some of these native names being, as he informs us, curious and interesting, such as White Waves of Autumn, Purple Pheasant's-tail, Gold Thread (a name more recently applied to one of the Japanese varieties), Purple Butterfly, Crystal White, and Yellow Tiger's-claw.

In 1830 seedlings were first raised in France, the produce being remarkable for variability, much to the delight of the amateurs of Toulouse and Avignon, who now began to christen their seedlings after their national celebrities. Chevalier Bernet, of Toulouse, raised the first European seedlings, some of these being, as Mr. Salter tells us, still (1865) highly prized. Among these were Christine (Ne Plus Ultra), Chevalier Domage, Maréchal Duroc, and Insigne. Other growers followed, such as MM. Boisgirard, Regnier, Rantonet, and at a later date MM. Bonamy, Pelé, and Lebois.

THE FIRST ENGLISH SEEDLINGS were raised in or about* 1830 by Mr. Isaac Wheeler, gardener and porter at Magdalen Hall (now Hertford College), Oxford. These he reared from home-saved seeds at Beaumont Buildings, in that city, and on December 2, 1832, he exhibited some of his seedlings in London, and received a silver Banksian medal for them as the earliest seedling Chrysanthemums raised in England. This medal, and also a drawing of one of the plants, may yet be seen, being in the possession of a member of the Wheeler family still resident in Oxford. Other seedling varieties were raised in Norfolk by Mr. Short and Mr. Freestone about the year 1835, Nonpareil, Norfolk Hero, and Prince of Wales, with others, being the pioneers.

About 1836 seedling Chrysanthemums were produced in the Channel Islands for the first time, and a great improvement began to be effected among large-flowered varieties. Many of these early Channel Island varieties were obtained by Mr. Chandler, then of the Vauxhall Nursery. Beauty, formosum, and lucidum were really good show kinds. In 1838 Mr. Salter settled at Versailles, and finding the climate suitable, imported many of the best known varieties from England, and set about their further improvement. In 1840 his collection of English, French, and Jersey seedlings amounted to between 300 and 400 distinct kinds. In 1843 seedlings began to be raised in the nursery at Versailles, and some of the results are given by Mr. Salter himself as follows: In 1844 Annie Salter, Mad. Poggi, and Queen of Yellows; in 1846 Fleur de Marie, Cyclops, and Nancy de Sermet; in 1847 came Queen of England, one of the best of white kinds for cut blooms.

A public Chrysanthemum show for cut blooms was held at Stoke Newington in 1846. To Mr. Fortune, as has been stated, we are indebted for the original Pompon from China, namely, Chusan Daisy and Chinese or Omnium minimum. These were introduced in 1846, and thence dates a new era in Chrysanthemum culture so far as this section goes. In the "Gardeners' Magazine of Botany" for 1850 we find many varieties of these French Daisy kinds described, and

* Salter, at p. 9 of "The Chrysanthemum," says: "In 1830 seed was first saved in the south of France."

four sorts are represented in a coloured plate.

MODERN JAPANESE VARIETIES.—Both the large-flowered and Pompon varieties were largely grown and much improved up to 1862, when again Mr. Fortune introduced a new strain in the shape of seven varieties from Japan. So singular were these in shape and colour from all reputed standards of perfection at the time, that they barely escaped total neglect, and consequent extinction. At the present day, however, these once neglected kinds stand in the first rank as decorative plants, and finer and still finer varieties make their appearance every year raised by Major Carey and others in the Channel Islands and on the Continent. Mr. Salter in 1865 lamented that some of the best original Chinese tasselled kinds were wholly lost. Of those then grown, however, he mentions Golden Lotus, Quilled Pink, Tasselled White, Tasselled Yellow, Two-coloured Incurved, and Yellow Waratah. Where are these kinds now? Lost, no doubt, in the race after novelty. One Japanese kind which Mr. Fortune tried to bring home was unfortunately lost on the way. This had its florets edged very beautifully with a hair-like fringe. Writing from a florist's point of view in 1865, Mr. Salter says: "The form of the flower has become so beautiful, that it seems scarcely possible any amount of cultivation can improve it, but both size and colour may be augmented."

It is true that we have many fine selfs white, yellow, orange, rose, and crimson, but violet and scarlet are at present unknown. There are but few edged, mottled, striped, or tipped varieties. Now, to-day we have, however, form more perfect in Mrs. G. Rundle; colour more vivid in Progne, Crimson Velvet, and others; and size has been considerably augmented by improved methods of culture, if not also by actual seminal variation. In the modern Japanese varieties we have form and colour of the most beautiful, and also another valuable quality, many of them blooming a month later than the other kinds, and so we can extend the Chrysanthemum season by their aid. Early blooming races of large-flowered, and also of Japanese, varieties are now desiderata, and we yet live in hopes of seeing the Chrysanthemum in all its forms thus rendered amenable to sure and certain open-air culture in our climate.

A blue Rose may be an impossibility, but we are told that a variety of the Chrysanthemum exists in Japan with blue flowers. It is represented very frequently on Japanese porcelain, both ancient and modern, especially that of Satsuma and Kioto; it also appears on *cloisonné* enamels and embroidery. In the "History of Nin-toku-ten-wau" the following passage occurs: "In 386, in the seventy-third year of his reign, seeds of the Chrysanthemum were first introduced into Japan from a foreign country, both blue, yellow, red, white, and violet." The Japanese commentator remarks: "By a foreign country is meant the kingdom of Paik-tse, one of the states of Corea." In the palace of the Mikado, at Kioto, is an apartment decorated entirely with paintings and carvings representing this popular Japanese flower.

CHAPTER IV.

RACES OR SECTIONS.

In order to give a clear idea of the cultivated races of the Chrysanthemum now popular in our gardens, we have tabulated them according to their distinguishing characteristics. Of course it must be understood that these distinctions of race are of an arbitrary character. Some of the races, especially the Incurved, Reflexed, Pompon, and Japanese, have become more or less blended by the efforts of the cultivator and raiser of new seedlings; thus we have sub-races in the hybrid Japanese kinds, of which Elaine, Peter the Great, and Ethel are examples. The varieties of Cedo Nulli unite the Pompon with the small-flowered Anemone race, and there are hybrid Pompons with reflexed florets and large flowers, such as Trevenna, Aurore Boreale, and Sœur Melanie. Such also are some sorts among the early blooming Pompons. A variety called Garnet seems to be a forerunner of a sub-race of the Japanese Anemone-flowered Chrysanthemums. Progne (Reflexed) and Japanese Violet (Japanese) also are welcome as varieties having a distinct and really appreciable fragrance or Violet-like perfume; thus another charm is now added to this already popular flower. For all practical purposes, however, the following arrangement of races may stand as it is written:—

Race I.—*Incurved or Ranunculus-flowered, generally known as show or exhibition kinds.*—The florets are strap-shaped, curving inwards, so that in the most full and perfect blooms the backs of the florets only are seen. Examples: Mrs. Rundle, Alfred Salter, General Bainbrigge, King of Denmark, Lady Slade, &c. (See illustration.)

Race II.—*Recurved or Reflexed-flowered.*—Plants mostly of excellent habit of growth, and so good for specimens. Florets strap-shaped, but curving outwards from the centre, so that the inner surface of the florets only is exposed. Examples: Annie Salter, Progne, Golden Christine, Dr. Sharpe, &c. The inner face of the florets being fully exposed in all reflexed flowers, it naturally follows that the varieties of this group are most remarkable for deep and vivid colouring.

Race III.—*Anemone or Quilled Aster-flowered.*—The varieties of this race have an outer circle of strap-shaped florets, only the disc or centre of the flower being raised cushion-like and made up of closely arranged tubular florets. Examples: *Large-flowered Anemones* — Fleur de Marie, Glück, King of Anemones, &c. *Small-flowered or Anemone Pompons*—Marie Stuart, Madame Montels, Calliope.

Race IV.—*Pompon small reflexed or Chusan Daisy-flowered.*—The plants of this race have an excellent twiggy or bushy habit of growth, and produce numerous small button-like flowers for the most part having reflexed florets. Examples: Bob, Snowdrop, Mdme. Marthé, General Canrobert, &c. Some varieties of this class have florets fringed or toothed at their tips. Examples: Marabout, Innocence, fimbriatum, Princess Meletia, &c. These are often known as fringed or fimbriated Pompons,

and the larger flowered kinds are sometimes called hybrid Pompons, being intermediate in size and character between the typical Chusan Daisy or Pompon proper and Race II. or large-flowered Reflexed kinds.

shoots only are strongly grown. All the florets are involute and tubular or quill-like for four-fifths of their entire length, their tips being dentate or toothed. Example: Meg Merrilies, Sultan.

Anemone-flowered Chrysanthemum Madame Montels (disc florets yellow, ray florets peach-rose). (See page 21.)

Example: Trevenna and its varieties.

RACE V.— *Quilled or Pin-feathered Japanese.* — This race is characterised by plants naturally rather tall and straggling in habit. Flowers very large, 6 inches to 9 inches in diameter, when the main

RACE VI.—*Japanese or Tassel-flowered.*—Plants of tall and robust habit, requiring exceptional good culture in order to obtain large blooms. Flowers rather loose, composed of long, flat, or narrow strap-shaped florets. Modern examples: Elaine, Ethel, Fair Maid of Guern-

Incurved Chrysanthemum Queen of England (blush white). (See page 21.)

sey, Oracle, Peter the Great, James Salter, all with strap-shaped petals, tolerably flat or uncontorted. Tokio, Gold Thread, Bronze Dragon, Dr. Masters, and others have florets revolute, twisted, and thread-like, but not really quilled or tubular, although apparently so at first sight.

Pompon Chrysanthemum (spray of flowers, reduced). (See page 21.)

Some Japanese varieties have tubular florets —Rob Roy, for example —and serve as the connecting link between the Races V. and VI.

When in Japan, the late Mr. Fortune sent to this country seven remarkable Chrysanthemums, which proved exceedingly distinct in size, form, and colour from the ordinary kinds grown here. From the types then introduced have been raised kinds still more remarkable for diversity, possessing either enormous size, peculiarity of form, or novelty of colour. Although of a distinct type from the Chrysanthemums in general cultivation, no difference in treatment or soil is necessary to secure a succession of flowers from November until January or February. Many of them remain longer in bloom and bloom later than the Chinese kinds, so that we may have our greenhouses gay with them all through the dull winter months when flowers are scarce.

Japanese Chrysanthemum James Salter. (See page 24.)

The effect produced in the conservatory by their fantastic forms and brilliant colours is most novel and pleasing, many of their immense blooms having more the appearance of tassels formed of the gay plumage of tropical birds than of flowers. These original varieties were japonicum, Bronze Dragon, roseum punctatum, striatum, laciniatum grandiflorum, and Yellow Dragon. Concerning these Mr. Fortune gave us some interesting information. He obtained several kinds from Japanese gardeners, which he brought over to Shanghai, where he left them in the charge of a Chinese gardener while he went northward to Pekin. On his return he found that many of the roots he had collected were dead, and that only a few remained, some of which were imported safely into England. Of these two or three kinds only fell into the hands of Mr. Salter, of Hammersmith; but from seeds of these two or three seedlings were produced, which yielded flowers not only differing from those of the parent plant, but identical with those which Mr. Fortune had collected in Japan, and which were lost in China. This could be no case of hybridisation, for no flowers of the kind had been previously seen in Europe. It was a case of pure seminal variation.

It has been proposed to class Japanese Chrysanthemums into three divisions as follows: Ribbon varieties, Twisted varieties, and Thread varieties. The first or Ribbon varieties would comprise those of which the florets are reflexed and droop below the calyx—namely, Meg Merrilies, Baronne de Prailly, Fulgore, Gloire de Toulouse, Triomphe du Nord, Fulton, Elaine, Madame C. Audiguier, Arlequin, Rosa Bonheur, Triomphe du Châtelet, and others. The second or Twisted varieties would include Yellow Dragon, grandiflorum, Hero of Magdala, James Salter, Chang, &c. Thirdly, the Thread varieties would be such as Cossack, Gold Thread, and Madame Godelet. Then we have many of our best varieties with their florets erect or partly so—namely, Sarnia, Ethel, Fair Maid of Guernsey, Peter the Great, Daimio, Madame Lemoine, Jane Salter, Soleil Levant, erectum superbum, Oracle, Diamond, M. Maney, La Nuit, Bouquet Nationale, and others. The beauty of the Japanese consists in their great diversity of colour and form. There are two varieties of Japanese, or rather now classed as such, which might with advantage be added to the large Anemone-flowered sorts—namely, Duchess of Edinburgh and a variety named Minnie Chate. The former has pure white guard florets with a pretty mauve centre; the latter has lilac guard florets with lilac centre.

A new classification is certainly desirable for the now numerous and handsome Japanese varieties, but it is necessary that such classification should rest, if it be possible, on sound structural ground, and not upon mere external appearances. The three sections just proposed scarcely allow of scope for future improvement, nor does it comprehend all the structural differences as displayed by the kinds as already distributed. A noted raiser sent me some very fine seedling blooms this season, and much as I had known and expected of the Japanese Chrysanthemums, I never even dreamed that such changes could so quickly and surely be wrought in this beautiful class. Anemone-flowered Japanese, as large as tea-saucers and of all colours, from white to crimson-scarlet and purple through all the shades of sulphur, primrose,

buff, yellow and red, are surely enough to make a grower's "mouth water." Several of my friends are taking Mr. Forsyth's advice, given as long ago as 1872, and are saving seed from good varieties of large-flowered and Japanese varieties. Both Mr. Thompson, of Ipswich, and Mr. Benary, of Erfurt, offer Chrysanthemum seed of the various sections for sale. Florists are a little too apt to have set ideas, and quite right they are in adhering to them (from their own standpoint), but what I and many other lovers of the Chrysanthemum desire are some of the lovely single-flowered seedlings which the florist persistently throws away should they appear among his seedling plants. Now that single Dahlias and Pyrethrums of the P. roseum section are so popular for their brilliant colours, is it not desirable that some of us should have single-flowered Chrysanthemums of Daisy-like form and good distinct colours as brilliant as it may be possible for us to obtain? I submit the following as an example of the classification required in the Japanese section:—

Section 1.—Florets strap-shaped for more than half their entire length; (*a*) florets erect, displaying almost as much of the colouring of the back part as the front—Ethel, erectum superbum, Oracle, Peter the Great, &c.; (*b*) florets reflexed, showing front colouring most—Elaine, Beauté du Nord, &c.; (*c*) florets twisted, curled, or variously contrasted, showing both back and front colouring of the florets in a more or less irregular manner — Cossack, Gold Thread, Tokio.

Section 2.—Florets quilled or tubular for more than half their entire length; (*a*) florets curving upwards or erect—Soleil Levant, Red Dragon, Meg Merrilies; (*b*) florets reflexed.

Section 3.—Florets of the disc tubular, densely packed in a raised cushion-like mass. Florets of the ray flat, slightly recurved. Popularly known as Japanese Anemone-flowered. Garnet and one or two others afford good examples of flowers in this section.

Speaking of the Japanese varieties in 1881, Mr. Henry Cannell, of Swanley, writes as follows concerning their distinctness and beauty:—

"These are very novel and striking in appearance, and perfectly distinct from the ordinary kinds of Chrysanthemums; most of the varieties do not fully develop their flowers until Christmas, and are therefore valuable on that account. They are useless for small specimen plants, as their habit is long, and they require to be treated similar to the incurved varieties, that is to say, to let the plant grow upright. They must have good cultivation, and as soon as the flower buds appear they must be reduced to one on each shoot and grown very strongly, otherwise they will possess no beauty. If damp is kept from them they will continue in bloom a long time."

From the *Gardeners' Chronicle* we learn that the Japanese varieties were not introduced into England until 1862, but Mr. Crawford (H.M. Consul at Oporto) tells us that the Japanese varieties had long been cultivated in Portugal before their introduction into this country. The origin of the different races is due to the different degrees of development of the individual flowers or florets. We must divest ourselves of the popular idea of the Chrysanthemum bloom being an individual flower, and look upon it as a flower-head or capitulum consisting of from one to two hundred or more separate

ndividual little flowers. In the wild plant we get the Daisy-like flower, the ray florets having irregular strap-shaped corollas, and the disc (or "eye") florets have regular 5-toothed ones. Mr. Henslow thus points out the various changes: "I. To strap-shaped, becoming flattened from base to tip. (1) Rolled inwards; (2) rolled outwards; (3) loose and spreading; (4) do., but much attenuated, pointed, or bifurcated. II. The tube retained. (1) Short, with five slightly enlarged teeth (Anemone); (2) teeth much enlarged and multiplied (Dragon); (3) tube elongated with no teeth (quilled); (4) quilled, but open or spoon-shaped at the end (as in Emperor of China)."

Race VII.—A new class has now become necessary for such varieties as Garnet, Fabian de Mediana, and others, of what may be called the Japanese Anemone-flowered group or section. These flowers are distinguished by their raised or cushion-like mass of disc florets, margined by long drooping fringe composed of the outer or ray florets.

Race VIII.—*Early-flowering Pompons and hybrid Pompons.*—A valuable modern race of Continental origin, consisting of plants of bushy habit, bearing a profusion of reflexed and Pompon-like flowers. When well established on open-air borders and on warm soils they commence flowering in August, and continue in bloom until the severe frosts of November or December. They form valuable early autumnal decorative plants when grown in pots. Examples: St. Mary,* Fred. Pelé, Illustration, Précocité, Gold Button, &c. It is by many erroneously supposed that the early-flowering or summer Chrysanthemums are of recent origin. The following extract is from the "Gardener's Magazine of Botany" for 1850, and shows that even thirty years ago a start was actually made, and hopes entertained which are realised only as it were to-day: "M. Pelé, a distinguished horticulturist of Paris, has also obtained many varieties, the most interesting of which is called Madame Pépin, and which flowers constantly about a month before the others. It is probable that this new type will furnish other varieties as early, which will impart a novel and important quality to Chrysanthemums."

Race IX.—Single-flowered Pompons or Indian. Example: New Departure (Teesdale), and many other kinds.

Race X.—Single-flowered Chinese or large-flowered. The large-flowered Anemone varieties are semi-single forms of C. sinensis, just as the small-flowered forms of Anemone kinds are semi-single Pompons.

Race XI.—Single-flowered Japanese. Example: John Rae (Burbidge). A single Daisy-like flower, with slender bronzy ray florets, raised in 1882 in the College Gardens, Dublin. Tisiphone (Salter) is a good single red, figured in the *Garden*, 1883.

* St. Mary (Cannell) is the same as Souvenir d'un Ami (Ware).

CHAPTER V.

CULTURE.

I. For ordinary decorative purposes.—The first object in the culture of these plants for this purpose is to obtain dwarf specimens, and to preserve all the foliage near the base of their stems. To effect this, the cuttings should be taken from the old stools in March or early in April, striking them in a shaded part of a cold frame under a hand-glass, and, as soon as rooted, the young plants should be potted singly into small pots filled with sandy loam, to induce them to emit an abundance of roots. A cool airy situation out of doors or in a cold pit should be selected for them, and constant attention be given to the supply of water. After standing two or three weeks in this position, they should be shifted into the large pots they are intended to bloom in, one plant in an 8-inch pot or three in a 12-inch one, using as compost a mixture of equal parts loam and rotten manure, and soon afterwards the top of the plant should be taken off, which will cause it to protrude branches, and these again may be stopped if they have grown strongly and it can be done before the end of June. The old stools from which the cuttings were taken in March may be planted out under warm walls, or near palings, and will then afford strong tops for rooting in August. Five cuttings should be placed in a 7-inch pot, and these if grown on freely make useful little plants. During the whole of the time the plants are out of doors, which will be till the approach of frost, they should stand quite clear from each other, that each one may have the full influence of the air, and being carefully watered every day with pure water, and occasionally with diluted liquid manure, the new growth is vigorously developed, and the blooming consequently satisfactory. The plants may stand on a sunny vine border or beside walks in sheltered, but not in shaded, positions; stake early and secure the plants from being blown over and damaged by high winds. If the points of the shoots which are last taken off can be induced to root quickly, they make pretty little plants of a few inches in height, surmounted with flowers nearly as fine as those on the larger specimens, and they are useful for the fronts of shelves or to stand before the large pots. On the removal of the plants to the greenhouse crowding should be avoided, and a full supply of both air and water given daily until the flowering season is past, when they may be removed to a shed or placed in the open ground, and protected at first from severe frosts by means of a mat or two thrown over them.

A good and simple plan of growing Pompon and other free blooming varieties of Chrysanthemum is to plant out the rooted cuttings in April or May, on open sunny borders in rows 5 feet apart, the plants being 4 feet apart in the row. Stop once or twice to make them bushy. Such plants carefully lifted and potted early in October produce abundance of flowers.

II. For large blooms.—In the culture of standard and trained dwarf Chrysanthemums judicious stopping and careful tying into shape

are main features in their production. Now, on the contrary, when large blooms are desired, stopping the growths is reduced to a minimum, and success depends in a great measure on the judicious application of suitable manurial stimulants, on thorough maturation of the stout main shoots which are restricted in number from one to three on each plant, all axillary shoots being removed almost before they appear, and all the training the plants ever receive is securing them to upright stakes to prevent injury from wind. On the plants being grown on from the cuttings or rooted-sucker stage in December or January to the blooming stage in November without any check or other injury, the production of really fine blooms may be said to depend. The stoutest of rooted suckers are preferable, but if suckers be weakly or drawn by the overcrowding of the plants when housed for blooming, then it is best to depend on the most solid and vigorous cuttings obtainable. Place each carefully in a small pot of sandy loam in a cold pit or frame, taking care that they be as near the glass as is possible in order to prevent their becoming drawn up in a weakly manner. Give air freely, drawing the lights off entirely during bright warm days. Repot from time to time in good loamy soil, keeping a sharp eye on the state of the roots, as plants which are allowed to become root-bound or checked in their early stages rarely, if ever, give satisfactory blooms. As soon as all danger from spring frosts is over the plants may be placed outside near a wall or fence, or in any position fully exposed to sunshine where they may be sheltered and secured from injury by rough winds. Temporary lath or other light fences, formed of upright stakes and wires not less than 5 feet in height, serve admirably, as the plants may be safely secured to them, and the light framework of slender sticks, with stouter supports here and there, does not prevent their obtaining the full benefit of air and light, both so essential during all stages of growth. The production of all growth from first to last without artificial heat of any kind, and in full exposure to sun and air, is the secret of proper growth maturation. Ripening up the growth in August and September means but little unless the previous growth has been well nourished by applications of soot water, and now and then a dose of liquid manure or soap-suds. An occasional syringing with soot water improves the leafage, and serves as a simple preventive to insect and mildew ravages. About the end of August or early in September is a critical time with growers of large blooms. Flower buds will be showing at the ends of the strong upper branches or shoots, and it is now imperatively necessary that the buds in the leaf axils below be removed with the points of scissors or penknife. This causes all the flower-producing power of the shoots to become concentrated in the terminal bud, and the result is a bouncing big bloom early in November, just in time for the exhibition stands. This operation is called

SETTING THE BUD, and unless it be duly performed in the nick of time, the two or three axillary buds immediately below it take advantage of the slackening of growth which takes place while this terminal flower-bud is forming to push forth on their own account, and after growing away for 6 inches or 1 foot these also each form what is called "terminal crown buds," but which are more properly "secondary" or

axillary ones as opposed to the terminal or primary buds which form a few weeks earlier at the apex of the unstopped main stem. Enormous blooms are thus obtained by this system of growth—force concentration. Some growers take out the primary bud as soon as it appears, and thin out the secondary shoots which protrude below it to one or two at the most, and so treated, aided by careful attention to feeding, noble blooms are obtained, and one has the choice of two or three flowers instead of limiting one's chances to one bud and its future development, as is the case when the terminal bud only is retained. Strong-growing kinds flower best from the third branching, that is to say, the flower-buds first seen are pinched out, and the strongest shoot is selected from just below them to lead away. Weak-habited kinds are not easily overgrown, and the second bud which shows is allowed to bloom. Messrs. Dixon give the following directions as to the culture of Chrysanthemums for larger blooms. They are clear and to the point: "The stands of cut blooms to be seen at exhibitions show to what perfection this flower can be brought by skilful treatment. In the early stages of growth the same soil and treatment are necessary as those already described, except that the plants are not stopped, but allowed to grow naturally, and it will be found that as the season advances the crown will branch into three or four leaders, which should be allowed to grow, but all laterals should be removed as soon as they appear. When the flower-buds show themselves in September, the centre bud must be the one retained, as it produces the largest bloom. All the others must be carefully removed without bruising the stem, except when the centre one is imperfect, in which case one of the others must be left instead. If possible stand the plants in single rows, with room enough to get between each row, putting in a good stake at each end and one in the centre. Then stretching wire to each stake, you can tie the stick by which the plant is supported to the wire, and prevent the wind from blowing them about; it also exposes them thoroughly to sun and air. Some growers for exhibition put two plants in a 10-inch pot, but we prefer only one in an 8-inch pot. Use manure water liberally until the flowers show colour, taking care not to give it when the plants are dry, but water first and then apply it." Since the above was prepared for press, I have been so fortunate as to gain the practical experience of a successful cultivator of the Chrysanthemum near Liverpool. I think I may fairly say that better or more comprehensive directions were never before given on this point.

STRIKING AND STOPPING.—I strike at the end of February or early in March. If rooted in February in gentle warmth and then hardened to cool treatment as quickly as possibly, the plants can be placed in their flowering pots (10-inch) in May. One flower and only one stem should be encouraged from the Mrs. G. Rundle type to produce large flowers, while three or more shoots should be encouraged from Queen of England, Empress of India, Golden Empress, and others. These should be stopped as soon as rooted, and the number of shoots required encouraged to lead upright. These with those not stopped will produce a small bud during May; the points of the shoots should be taken out at once to prevent this bud forming, and all the side shoots taken out with the

point of a knife as soon as they can be seen except one nearest the top, which must be encouraged to extend. If you allow the bud to form and the plants to stop themselves, time is lost and the next bud is late. The plants should be hurried out of this stage as quickly as possible. The next bud will appear about the middle of July, known as the July bud. Many leave or rely on this bud, but it is too early, and it will only produce rough, badly-shaped flowers. Do not allow this bud to form; remove all side shoots but one, as in the case of the earlier bud, as soon as they can be seen. The shoot you allow to grow will produce another bud about the last week in August after the plants have grown about a foot or little more. The August bud is the one to be selected, and will produce fine flowers. This bud appears at the end of the shoot, and is known as the crown bud. But suppose there is a doubt about the matter—one bud is taken for a chance flower, and the remaining two are treated upon a different principle. The bud upon the second shoot may also be taken, but, as a measure of precaution, instead of rubbing out the three growths at its base, one is left temporarily to divert the flow of sap from it until it is clearly seen that the force of the sap is not strong enough to spoil the bud, when of course the growth must be pinched out. The third shoot would be allowed to grow on, taking care to remove its two weakest companions as soon as the strength of each could be recognised. Thus the cultivator who adopts this system has three chances from the same plant, so that if he misses the mark with one flower he is sure to hit it with another. We have seen three distinct characters of flowers upon the same plant over and over again, the variations being due to nothing else than the time and manner of disbudding. The next point of importance in the production of large blooms is the theory of the ripening of the wood, which in the case of the Chrysanthemum will not hold water. There must be strength of stem and large green leaves down to the rim of the pot to produce good-sized, well-formed flowers.

Mr. Lynes says that after "having cultivated the Chrysanthemum for some years I do not know of any one system of which you may lay down as a hard-and-fast line to follow and guarantee results. What is termed the natural system is to let the plants grow as they will until they show the summer bud, which will generally be from the middle of June to the end of July. This bud is useless. Several shoots are produced below it, when as many may be left as the cultivator deems fit—from three to eight, variety and strength of plant to be considered. These shoots, being left to grow, will each show another bud, which is termed the crown bud, and that is the bud to produce fine flowers, providing it comes at the proper time. When first seen it is very small, and has three vigorous shoots around it. These should be at once pinched off, likewise all after-growths, to direct the whole resources of the plant to the flower. The difficulty is to induce the plants to show this bud at the proper time, for upon this (providing the plants are healthy and vigorous) depend the future results. Take three plants of any one variety, treat them alike in every respect; the probabilities are one will show the crown bud in the middle of July, another in the middle of August, the third not until September. My opinion

is, the time for them to show this bud is between the 10th of August and the 7th of September. Seasons vary, but from several years' experience I have no hesitation in saying a great percentage of buds taken between the above-named dates will prove satisfactory. If taken before, they are apt to become hard and not open properly."* I know at least one celebrated grower of large blooms for exhibition who, having struck the cuttings in the usual way, grows them on by planting them out in the border of a cool orchard house, where they are trained to single stems, each bearing one enormous flower at its apex. Under this system there is less danger of the plant suffering from drought at the root, and some of the varieties attain a height of 10 feet to 12 feet, the stems and foliage being enormously stout and healthy and the flowers exceptionally fine.

III. FOR TRAINED STANDARDS.—In order to grow good standards select the strongest and stoutest of the root-suckers which can be found on the old plants after blooming in January or February at the latest. Carefully separate them from the old stools with as many roots as is possible, and pot them at once in 4-inch pots. Be careful as to names, as any neglect of this kind proves a fertile source of disappointment. Place them in a cold pit or deep frame on a bed of coal ashes, and sprinkle with water from a fine rose. Keep the lights down close for a week, so as to induce the protrusion of new roots, after which air should be freely given (except during hard frost), and on fine warm days the lights should be entirely removed. If lateral buds show themselves in any way prominently, carefully remove them with the sharp point of a pair of scissors, or with a sharp penknife, until the required height is attained. As growth proceeds, secure the growth to a slender stake, so as to prevent its being accidentally broken. Pot on as may be required, taking care that the young plants never become root-bound in the pots. In April or early in May, all danger from cold being over, the plants may be placed on a bed of coal ashes in the open air where they will be fully exposed to sunshine and air, but sheltered from rough winds. On no account must they be allowed to suffer from want of water. When the carefully nurtured single stem has reached the desired height, take out the upright stake which has hitherto supported it, and add one having a semi-hemispherical wire trellis at the top of this shape, and 10 inches or 12 inches in diameter. Bend the shoot around the outer rim of the framework. The plants should now be placed in their blooming pots. Now for the first time the axillary buds (hitherto carefully removed) may be encouraged to develop, which they will do speedily after the main shoot or stem of the proposed standard has been coiled round the frame. Judicious pinching now and then and syringing morning and evening with clear soot water will be conducive to the formation of strong shoots covered with clear healthy clean foliage. In cold districts it is not safe to stop or pinch off the growing points after about the last week in June. If pinched too late, the wood does not become thoroughly matured ere the flower-buds form, and the production of fine flowers solely depends on strong and well-ripened growths.

* Paper read at the Wimbledon Gardeners' Society, December, 1882.

In warm localities, as in the south of England, pinching may go on as requisite until about the second week in July. As the pots become filled with roots, manure water and soot water may be given on alternate days. The best varieties for making good standards are the following: Large-flowered — Mrs. Rundle, George Glenny, Mrs. Dixon, aureum multiflorum, Empress of India, Eve, Venus, Lady Slade, Lady Hardinge, and White Venus. Annie Salter well grown makes a telling specimen, as also do most of the varieties of the Pompon and Pompon Anemone race under liberal culture. Mr. Brunlees, Brilliant, Faust, Julie Lagravère, Calliope, Elaine, Mrs. Haliburton, and Peter the Great also make effective standards.

IV. FAN-TRAINED DWARFS.—Chrysanthemums of the Mrs. Rundle (Incurved) and Annie Salter (Reflexed) types make very attractive specimens when trained in a mushroom or pancake-shaped manner on a trellis-work of bamboo sticks and wire. As to tying and training, instructions are here given. The following directions are those supplied by Messrs. Dixon. The practical notes on stopping are especially valuable and must he carefully followed: "In the choice of plants for specimens care should be taken to select only those varieties possessing the following qualities—viz., free blooming, clear and distinct colour, fine foliage, and graceful habit. Every attention has been paid by us to select only those sorts which contain the above properties, and which will be found the best. The soil should consist of two-thirds loam and one-third rotted stable manure, with a liberal admixture of sand. Two inches of broken potsherds should be placed in the bottoms of the pots for drainage. If large specimens are required for exhibition, it is essential that cuttings should be made in the autumn, and only such as are healthy and robust selected (or a strong sucker with roots). These should be potted into 2½-inch pots, and when rooted shifted to a large 3-inch size. As soon as they are established in these they must be stopped, being careful to take out only the extreme point of the shoot containing the unexpanded leaves, as the plant then continues to lengthen, and it also encourages the growth of the laterals, of which five or six will be found sufficient. These, as they increase in length, should be pegged down, and great care taken that they are not injured or broken. Place them in a cold frame near the glass, giving air on all favourable occasions; continue to shift, and as soon as the laterals are 6 inches long, they must be stopped. Do this until the second week in July. In the last week in June the plants should be shifted into their blooming pots, which are 11 inches in diameter. Never shift and stop at the same time. Fourteen days should always be allowed between these operations. The shift then strengthens the laterals. (For exhibition specimens this should never be departed from.) When in their blooming pots, we stand them on three small pots in a good open piece of ground; this enables the water to escape freely, and prevents the plants rooting into the ground. As soon as the roots get to the sides of the pots, we commence giving liquid manure. For the first three weeks, once a week; the next three weeks, twice a week; after that, until they show colour, every other day. The foliage should be well syringed, and constant and

well watering is necessary during hot weather to ensure green and healthy foliage. Nothing spoils the Chrysanthemum sooner than want of water. They will now require more care in regulating the shoots, which should be kept down as near the edge of the pots as possible. About the middle of September train the plants into the shape you want them, by neatly staking each shoot, leaving the stick longer than the shoots, as they continue to lengthen until they come into flower. As soon as the flower buds appear, disbud. This is done by removing all buds except the one in the centre of each branch; for if the plant be vigorous, these will be quite enough to insure a fine head of bloom, but if a quantity of bloom is preferred to large flowers, little (if any) disbudding need be done. They should be housed about the middle of October; but in this be guided by the state of the weather, as they are better outside whilst the weather is open, and the buds do not show colour; the foliage improves by remaining in the open air. When housed, avoid fire heat, except when absolutely necessary, but give them as much air as possible.

"Pompons are cultivated in the same manner as the large-flowering varieties, but more stopping and less disbudding are necessary to ensure success. Another style of plant which has become very popular lately is the standard. Either Pompons or the large varieties will do, if care is taken to grow only the suitable varieties—of which now-a-days there is no scarcity. Vigorous autumn cuttings or suckers should be selected, shifting as already described, and staking the plant to the height you want the stem, which for exhibition is not generally less than 2 feet 6 inches. After they are a little beyond the required height, stop them, trying to get as many breaks as possible from the first stopping to form the head. Be particular in keeping all side shoots pinched off. A small framework of laths erected under the head is the handiest for training them on. The sorts selected are early varieties which enable us to stop them a fortnight later than the others, which is necessary to obtain a good head."

Compost and manures.—The best compost for the Chrysanthemum is one mainly composed of sound red loam, and the more vegetable fibre it contains the better. My own practice is to buy a few cartloads of this during November. It is dug from a mountain-side where the grass and other herbage is short and fine, being eaten off closely by sheep. Almost any kind of plant will grow in it, and it is of that texture which holds much water and yet is never "soppy," but friable, even after it has been squeezed in the hand. Sand in any pure form I do not use in the culture of the Chrysanthemum (except for rooting cuttings in), but instead I add a cartload of old lime-mortar to, say, five loads of the loam. A barrow-load of pure soot is added to the heap as it is turned over for the first time in December. If possible let this operation be done during dry, frosty weather. The soot is useful, as making the soil unpalatable to the worms, and as it consists mainly of charcoal or carbon in a fine state, and holds also some ammonia, it is manurial also. Some growers advise adding a fourth or more of well-rotted manure to the loam, but I am convinced that the finest and most floriferous growths are those made in red loam, lime rubbish and soot, as above described.

The right time to apply the manure is after the flower-buds are formed in August and September, about which time the soil becomes partially exhausted and quite filled with roots. It is quite possible and easy to grow large plants with enormous sappy leaves by adding manure largely to the compost at the final shift into blooming pots (say in May or June), but it does not follow that plants so luxuriantly grown, and so healthy in July, give the finest flowers in November. It must never be forgotten that size of leaf and apparent vigour of plant is no guide to good bloom, no matter whether the desired results are quality or quantity. I rely on a sound, sweet compost, careful and regular watering, and from the first week after the cuttings are rooted I freely expose the plants to sun and air, except during sharp frost. What is requisite is not growth only, but sound, firm wood, or growth well matured. Once every week during summer the plants receive a dose of soot water. I am now firmly convinced that many growers fail in using a compost containing too much manure during the early stages of the plant's existence, and by relying on a basis of sound loam we have the plant more entirely under control, as manurial stimulants can most easily be given in the liquid state when it is deemed desirable, or when it is most useful to assist forward and to aid the development of the flower-buds. Sulphate of ammonia, costing about 6d. per lb., is a wonderful stimulant, and one much used by Chrysanthemum growers. No other manure has such an immediate and direct action on the growth of this plant. We use 2 ounces dissolved in a 10-gallon water-barrow, preferring to give it weak and often rather than in strong doses. Now, here is a piece of advice given to me some time ago by Mr. N. Davis, of Camberwell: "Never give liquid manure to the plants while forming their buds, or else blindness will be the result." This advice more especially applies to plants from which "perfect" or "prize" blooms are expected, for we know that really creditable decorative bushes, well laden with third-rate flowers, may be grown by giving manure water freely as soon as the blooming pots become filled with roots, say in June or July; indeed, for specimen plants or large bushes it is almost a necessity; and Messrs. S. Dixon, in their notes on Chrysanthemum culture, say, in speaking of large trained specimens, "As soon as the roots reach the sides of the (blooming) pots we commence giving liquid manure." I am particular in clearing up this point of when and how and to what plants to apply manure water, as there has been much misunderstanding on this point and on that of the delicate question of how and when to stop and disbud, which is fully alluded to and explained in another place.

The addition of solid manure to the compost causes unstopped plants to grow too quickly, and so their growth is not sufficiently matured. On the other hand, specimen plants or decorative bushes are stopped frequently up to the second week in July in the south of England, or to the last week in June in the north of England, Scotland, and in Ireland. All this stopping and training of the shoots naturally checks the growth, and so a richer compost may in their case be used with more safety than for unstopped plants with only one to three stems from which large blooms are to be obtained.

SPECIMEN CHRYSANTHEMUMS.—According to a correspondent of the *Gardener's Magazine*, it is commonly supposed by those who have not had much practical experience in Chrysanthemum culture that whether the plants are required for exhibition or for the embellishment of the conservatory, it is quite early enough to strike the cuttings in March. But this is a grave mistake, as many growers find to their cost in their earlier efforts. When plants are required simply for decorative purposes, and their dimensions and the quality of the flowers are of no great importance, it is of but little consequence if the work of propagation is delayed until the end of April. In raising plants for specimens and for the production of first-class blooms, it is essential that the cuttings should be struck very soon after the termination of the flowering season. Some varieties do not produce a new growth so early or so freely as others, and the best advice an inexperienced cultivator could have upon this point is the recommendation to take the cuttings of the respective kinds as early after the end of the third week in November as they are obtainable. By striking the cuttings before Christmas several great advantages are obtained, the most important being the gain in time and the practicability of dispensing entirely with the use of artificial heat. Very little progress is of course made by the young plants until the end of February or early in March, according as the weather may be mild or severe, and it is not desirable it should be otherwise, as any considerable growth made during the short days of midwinter is not likely to be very satisfactory. The gain in growth is considerable nevertheless, as at the time the cuttings struck in spring have to be in the propagating pit the autumn-struck plants will be well furnished with roots, and in a condition to made a short-jointed growth from the first. My experience induces me to attach considerable importance to growing Chrysanthemums entirely without the aid of artificial heat, for although the skilful cultivator may, by removing the young plants from the propagating pit at the earliest moment, and hardening them off as quickly as possible consistent with their safety, avoid their being seriously injured, a cool structure is unquestionably the best for them during the time they receive the shelter of glass.

CHAPTER VI.

WATERING.

No plant requires more constant attention as to watering than does the Chrysanthemum. This is especially the case during July and August, when the pots become filled with roots and an additional strain has to be borne, as the plants are at that season about making up that portion of their growth upon which the flower-buds appear. Rain or soft river water is best if it is readily obtainable, but if pump or spring water must be used, expose it for at least some hours in tubs or

other open vessels, so that it becomes warm and aërated. My own practice is to water twice a day after the plants are placed in their blooming pots, say in May or June. Dribbling a little water on the surface will not do; nothing but a thorough soaking serves such a gross-feeding plant. Syringing the foliage every evening an hour or two before sunset is of great advantage in keeping the foliage clean and bright and free from green fly and other insects. When manure water is applied it is essential that the soil be thoroughly moist beforehand. If the earth is in any way dry always give a soaking of pure water before the manure water be applied. It then finds its way downwards, regularly becoming equally diffused throughout the ball of earth within the pot, and every rootlet is fed, and none are injured, as might otherwise be the case if watered with crude manure water when the earth was in a dry state. Soot water is a great aid to culture in many ways, and should be carefully prepared, so that no soot floats on the surface. Syringing with a clear solution of soot makes the leaves of a beautiful dark and glossy green tint, and is an excellent preventive of green fly. We water the whole collection every morning about eight o'clock, paying great attention to the thorough soaking of every plant; and to do this effectively when a plant has been allowed to become dry, three or four waterings are necessary. As the plants increase in size and the ball becomes filled with roots, it becomes necessary to watch the edges and sides of the ball narrowly, otherwise most of the water which should diffuse itself gradually and thoroughly throughout the ball of earth merely trickles down the inside of the pots, leaving the ball as dry as tinder, although apparently a thorough good watering has been given. We watch our plants very narrowly, and every week devote some time to ramming down the edges of the ball tightly with a blunt lath. A little labour and attention in this way is abundantly repaid. In very hot dry weather a mulching of rotten hotbed manure may be given, and this is especially valuable if the earth has been in any degree washed away in the operation of watering. Even a handful or two of short lawn grass from the mowing machine will economise labour and water also if it be sprinkled on the surface of the soil in which the plants are grown —I mean early in the season, before the soil is in any way exhausted by the ramifying rootlets; after that takes places mulching with rotten manure is most valuable.

STOPPING AND DISBUDDING.

Both these operations are of great importance in the growth and training of large specimens for show. Stopping the points of the main shoots must be carefully attended to. First, say in December or January, the rooted sucker or cutting has its points carefully pinched out, and this causes branches to appear from the axils of the three or four leaves below the part pinched off. Pinching or stopping must be done at the exact moment when side branches are desired, as only the bud at the very end or top of the shoots must be removed. To allow a shoot to grow 3 inches or 4 inches longer than is requisite, and then to stop it back into the partly hardened wood, is fatal in all ways. Here are Messrs. Dixon's rules on stopping, which may well be reproduced in this place. For specimen plants or decorative bushes stop until the second week in July, in the south

of England that is; in Ireland or north of England the last week in June is quite late enough to stop; after that time is fatal to good flowers. Again, never stop and shift on the plants into fresh pots at the same time. Ten days or a fortnight should always be allowed between these operations. The re-potting or shifting then strengthens the laterals. "For exhibition specimens," say Messrs. Dixon, "these rules should never be departed from." After the first stopping one to three shoots only should be allowed to grow on. Pick out all other growths with a knife. Unless the cuttings were carefully disbudded or cleaned ere they were inserted in the cutting pot, basal growths or suckers are apt to annoy one. Pick all these carefully away as soon as seen. Tall plants for large blooms are rarely stopped more than twice; they naturally stop themselves twice—indeed, in May and in July. To allow them to do this, however, is a sheer loss of time, and the better plan is to pick out the May and July flower-buds as soon as they appear, leaving only one shoot to lead up from immediately below the point on the shoot whence the flower-bud has been removed. It will thus be seen that stopping and disbudding are very nearly related in the middle stage of Chrysanthemum culture.

DISBUDDING PROPER, however, is taking out all side growths below the flower-bud, which is retained as the most likely to produce a fine bloom. Every axillary growth, or those which appear below the flower-bud, must be picked out, care being taken that the leaves are uninjured in the operation. August is indeed a busy month to the grower of Chrysanthemums, as it is but rarely that the careful work of disbudding can be left to ordinary assistants So far as decorative bushes are concerned, where quantity and fair, rather than superlative, quality of the blooms is desired, disbudding may be reduced to a minimum. A due thinning out of the weak shoots, or rather the prevention of their appearance, removal of sucker growths, and ample feeding and judicious stopping will produce fine plants, each shoot being either a wreath of flowers, or bearing a truss of four or five blooms at the top. Writing in August, 1880, Mr. Hinds says:—

"Chrysanthemum growers in all parts of the country will now be on the *qui vive* for the buds which will produce their fine show flowers early next November. Outside a very narrow circle the method of growing large flowers is indeed a mystery. Different kinds of compounds are recommended for potting; the size of pot in which they should be grown is diligently inquired after; when to pinch, how to pinch, and how many shoots should be grown to a plant are all questions that crop up periodically among the uninitiated. There are many who think they have only to 'order the good kinds' to insure success. But what a fallacy! The good or evil will be accomplished during the present month. Those who grow flowers for size usually grow from three to nine shoots upon a plant. I have seen good-sized bushes bearing fine flowers under a skilful system of cultivation and disbudding. Many of the early flowering kinds are now showing bud—of course in an embryo state; still it is there. Young shoots will be observed at the base of the bud which, if allowed to grow, will render the bud useless. But first of all examine the form of the bud and the vigour of the plant.

If the bud is cone-shaped, and the plant does not appear to be over vigorous, remove the embryo shoots at the base of the bud at once. Of course some knowledge of the kinds, as to whether they are early or late varieties, is indispensable. In a doubtful case it is prudent to leave the bud and one shoot, so that in the event of the bud turning out to be imperfect or too early for the kind, there is a chance left of obtaining a later flower from another bud. The removal of lateral growths, skilful disbudding, and feeding the plants occasionally with weak soot water will contribute much towards a display of fine flowers next autumn."

STAKING AND TRAINING.—Staking is necessary for at least two reasons—to prevent breakage by winds, and to enable specimen plants to be trained conveniently. Plants grown for large flowers seldom require more than a single stake to secure them, but it should be sufficiently stout to obtain a firm hold of the earth in the pots. Dwarf specimens may be trained on sticks laid flat-wise over the top of the pot and secured with copper wire to a wire ring fixed below the rim. These and a few short bamboo stakes inserted at various angles in the soil will be sufficient to secure the shoots wherever desired. Soft raffia or worsted may be used for tying purposes. Specimens for conservatory decoration are easily secured to slender stakes inserted soon after the plants are shifted into their blooming pots. Six stakes inserted around the sides of the pot and three in the centre will, as a rule, be ample, and, once in position, the main shoots can be secured as growth is made. When tall plants are grown for cut blooms, a few stout stakes 6 feet high may be driven into the ground, and three or four lines of tarred twine or wire carried along from one to the other, to which the tall shoots may be secured as growth progresses.

Bamboo stakes are preferable to deal sticks, being far more durable. As a substitute for either, rods of Hazel, Ash, Poplar, or Willow may be employed. In the case of Willows they should be cut after the leaves fall in autumn, and well dried by being tied in small straight bundles and laid upon the top of a smoke flue or on the top of a boiler. So treated they dry firm and straight, and cause no annoyance by rooting into the soil, as is invariably the case when they are used green.

GRAFTING two or three varieties of Chrysanthemum which bloom simultaneously on one stock, if not as yet a general practice, is sufficiently so to warrant some notice. In 1876 and 1877 Mr. Charles Turner adopted this mode of culture, and in the latter year (as we learn from the *Garden*, vol. xii., p. 175) he had over 200 fine plants worked as standards on 3 feet high stems, several sorts which bloom at the same time being grafted into one head. At Oxford also this grafting practice is pretty general, as we learn from a visitor at the Chrysanthemum show recently held in that city. Long ago, indeed, Mr. Fortune found Chinese gardeners employing Artemisia indica as a stock on which they grafted their Chrysanthemums.

THE "CUTTING-DOWN" PLAN.—During recent years the Chrysanthemum has become so essential for all early winter decorations, that various cultural practices have been devised and resorted to in order to obtain dwarf bushy plants, as also to induce a later habit of blooming, so that, instead of having a glut of

flowers all at one time, there should be a gradual succession from late in October until late in January—that is to say, during the most dreary period of our floral year. Wherever decorative bushes are required, a portion of the collection should be treated as follows: Early in May, when the plants are 18 inches or 2 feet in height, cut back the whole of the shoots to within 1 foot or 6 inches of the pot. This causes the plants to break out fresh and bushy, and also throws back the plants, so that they bloom later than would otherwise have been the case. Cut a few plants down in succession from May until the end of June. A friend of mine who cut down plants of Sœur Melanie, Peter the Great, St. Michael, and Mrs. Rundle in June last season had fine bushy plants covered with fresh flowers early in January, or nearly six weeks after others not so treated had bloomed. These plants were cut off level with the pot tops, and were kept moist only until new growths appeared. It must be borne in mind that this practice is not recommended except in the case of decorative bushes, as the individual blooms are not so large and are produced later on plants so treated. But there is a dwarf free-flowering freshness about plants so grown, and Mr. Orchard took first prize last year at Kingston with plants so cultivated and well fed with liquid manure. It is a plan to be especially recommended in the culture of flowering bushes for conservatory and greenhouse decoration.

CHAPTER VII.

CHRYSANTHEMUMS FOR SMALL GREENHOUSES.

Anyone who has a greenhouse, a well-lighted porch, or even a large bay window or two, should grow a few Chrysanthemums in pots outside during the summer, as they may be well bloomed even in a window if moved inside after the buds show colour and before sharp frosts set in in October. In country places every artisan or intelligent labourer might build a rough greenhouse with a few old lights for the roof, five shillings'-worth of timber for supports, and some pieces of canvas or bast mats for the front and sides. No flower is better worth attention, and amateur growers should encourage garden-loving workmen by giving them spare plants or cuttings. The following directions from *Gardening Illustrated* are specially suited for beginners.

There are three distinct objects for which Chrysanthemums are grown, viz.: First, specimen plants in which the beauty of the individual flower is subordinated to the training of the plant to some particular shape; second, for conservatory decoration where the object is to get a brilliant mass of colour irrespective of individual flowers or shape of plant; and third, for the beauty of individual flowers only, without regard to number of flowers or shape of plant. Each of these ends requires a distinct system of culture, and the great number of failures in growing Chrysanthemums are probably owing to mixing all three systems together

and keeping no definite object in view. In small greenhouses there is neither room nor need for specimen plants and great masses of colour, so we shall confine our remarks to the culture for individual flowers, which is by far the most interesting of the three.

PROPAGATING.—Cuttings should be put in round the edge of the pots in the usual way during the last week of January, not sooner, for we do not wish the plants to be drawn up under glass before we can venture them outside. The pots of cuttings should be put near the glass on a shelf in the greenhouse; there is no need for either bell-glasses or bottom heat; indeed, both are hurtful.

POTTING.—When the cuttings are rooted put them into 4-inch pots, keeping them still near the glass. When the roots come through the soil to the side of the pot shift into 6-inch pots, and as soon thereafter as the weather will permit stand them outside, tying each plant to a light stick to prevent its being broken by the wind. From the time the cuttings are put in until now, and, indeed, to the end of the chapter, never pinch; let the plants grow up to one single stem. Place the pots on slates to prevent the ingress of worms in such a situation that they may get the sun during most of the day. Do not plunge the pots or protect from sunshine in any way; this, doubtless, entails far more labour in watering, but it will be amply repaid by a dwarf plant, well-ripened wood, and consequently fine flowers. When the roots come through to the sides of the 6-inch pots, probably about the end of May, give a final shift into 9-inch ones.

STAKING.—When the plants are 1 foot high put a light stake 4 feet long in the centre of each pot, and tie the stems to this as they lengthen out. Towards the end of September we may expect gales of wind, so put three more light stakes at equal distances around the pot, bend them over, and tie all the points to the centre stake; this will be found more effective than one thick stake.

WATERING.—While the plants are in the open air water them frequently overhead through a fine rose, as well as attend to watering at the roots. If you have a command of hot water, make the water, for both purposes, perceptibly warm to the hand; this greatly tends to keep the plants in health, and takes but little extra time.

INSECTS.—Towards the end of summer two insects will probably give some trouble, viz., earwigs and green fly. The former show themselves by the leaves being eaten at the edges. Insert some rolls of paper between the stem and the stake and examine them in the morning, destroying the intruders. The green fly will be found to attack the points of the shoots; choose a dry, still evening, and thickly dust them over with tobacco powder, washing it off with the rose or syringe the following day. All shoots which spring from the roots must be carefully rubbed off until flowering is over.

FEEDING.—By the beginning of October the flower buds will form; then you must feed with manure; up till now you have not done so, and turn a deaf ear to those who advise you so to continue. Any good manure will do, but one of the many made-up ones in the market will be the easiest applied. Standen's is as good as any; a small dessert-spoonful, sprinkled over and stirred into the top soil, constitutes a feed; let a week intervene be-

tween the first two feeds, after that a fortnight between each until the flowers are past.

BEST VARIETIES: INCURVED.—Mrs. G. Rundle, white; Mr. G. Glenny, sulphur; Mrs. Dixon, yellow; Lady Hardinge, rose; Peach Venus, peach; Jardin des Plantes, golden; General Bainbrigge, bronze; Empress of India, white.

POMPONS.—Bob, crimson; General Canrobert, yellow; Cedo Nulli, white, lilac, yellow and brown forms; Madame Marthé, white and golden yellow.

JAPANESE.—Elaine, white; Ethel, late white; Fair Maid of Guernsey, late white; Peter the Great, yellow; Fulton, gold; Cossack, brown; Tokio, red; James Salter, lilac.

ANEMONE-FLOWERED.—Large: Fleur de Marie, white; Glück, yellow; King of Anemones, purple; Princess Louise, lilac. Small: Madame Montels, silvery lilac; Calliope, red; Dick Turpin, red and yellow.

MISCELLANEOUS OR REFLEXED.—Progne, crimson-purple; Crimson Velvet, velvety crimson; Annie Salter, yellow; Dr. Sharpe, magenta-red.

DISBUDDING.—When the buds are quite set and standing apart from each other is the time to disbud; this can usually be done at the time of housing for the winter. Leave only one bud to each shoot. If any green fly be found round the base of the bud left, remove it with a small brush dipped in water; there will probably be no further annoyance from these pests.

HOUSING.—Choose a dry day for housing, and the plants may be put close together, leaving only as much room as will keep the shoots from touching each other. About the time the flowers are expanding, mildew will probably make its appearance on the foliage. This is the result of a number of plants being housed in a small space, and the temperature kept at 45° or thereabouts, for the sake of the other inmates of the house. Nothing need be done; the flowers will win the race and then the plants can be cut back.

TREATMENT AFTER BLOOMING.—When the flowers are over, cut back the main stem, so as to leave only one or two of the small side shoots which have now formed; these are left to keep the sap flowing until shoots spring from the roots. These shoots from the base of the plant form the cuttings, which should be taken at the end of January, as directed at the commencement of this article. When you cut back the stems do not remove the stakes, for the pots by this time are so crammed with roots, there is a danger of all water running through the holes left and the plant perishing from want of it. You need not be very choice as to soil; perhaps the best is two parts rotted turf to one of well-decayed manure, mixed with a good deal of sand, riddled for the first potting, and rough for the other two. Under this system of

SINGLE-STEM CULTURE, leaving one bloom to each shoot, you will only get from three to nine blooms on each plant, but then they will all be good. Now suppose you pinch until you have ten stems round a 9-inch pot, the writer's experience is that if you have to flower your plants in a small house you will only have one or two good blooms on each plant, and these one or two will not compare either in size or finish with those on the single stem. Then you can easily house half as many again plants with single stems as you can those with ten. When we say that all the blooms on the

single-stem system are good, of course we do not mean that all are up to the exhibition standard, but simply that they are of good size and form. With fair luck about one bloom out of twenty should be fit for the exhibition table; it is the old story that under the same culture the man with 100 plants can beat him who has only ten. Another advantage of single-stem culture is that you can successfully flower the incurved varieties with long petals. As for what varieties to choose for a small house, the only limit is that none should be chosen that do not set their flower-buds by the time you have to house them, for under the confinement of a small house there is a danger of the plants making new wood and never forming flower-buds.

For those who have not time for this careful treatment, there is a simpler style of single-stem culture, which gives fair results. Put in cuttings and treat them as directed above, but keep them in the 4-inch pots till you can trust them outside. Select a sunny border; the soil should be in fair heart, but not enriched with fresh manure; turn the plants out of the pots and plant them 2 feet apart. Attend to staking, watering overhead, and at the roots if the weather is very dry, rubbing off shoots from the roots, and keep a look-out for earwigs and green fly. Nothing more is needed until the flower-buds are set, then lift the plants and pot into 7-inch pots. Use light soil passed through a fine riddle. Keep the foliage damp, and shade the pots by placing them on the floor of the greenhouse. In a week or ten days the pots may be lifted on to the stage, disbudding attended to, and liberal feeds of manure given. The blooms will come deficient in size, but well shaped and finished, and very much better than the average Chrysanthemums seen in small houses.

OPEN-AIR CULTURE.—The introduction of early blooming races of the Chrysanthemum must of necessity give a great impetus to its culture in the open air. Some of the more hardy of the kinds long ago introduced, such as the quilled yellow and old tasselled purple, flowered fairly well on sunny walls during mild Novembers. I have seen the cottage fronts and little gardens in the suburbs of London quite gay with these old kinds during mild seasons, but as a rule the Chrysanthemum was scarcely into flower before the severe frosts of November cut them off. Now all this is changed, and there are two distinct and satisfactory ways of growing the Chrysanthemum in the open air. The easiest way is to grow the modern kinds now known as summer bloomers, which begin to bloom early in August, and continue quite floriferous and gay until the frosts cut them down. Another highly satisfactory plan when large blooms are desired is to plant out strong rooted cuttings in March in a well-prepared bed or border at the foot of a sunny wall. Of course the cuttings if struck in heat must have been carefully established in pots and hardened off gradually before planting. As nights and mornings in March are often very frosty, some slight protective covering must be given to the young plants until fully established. After the end of April this will be unnecessary. Plant 15 inches to 18 inches apart, and as soon as they are established stop them for the first time, merely nipping out the point of the shoot. If a Chrysanthemum be stopped by breaking back a shoot to the hard

or hardening wood, it is fatal to its ever producing a show bloom. Shoots so stopped or broken off accidentally are better removed at once, as they always break weakly and badly afterwards. After stopping, leave the two strongest growths that make their appearance, and lead these up straight, nailing them to the wall at intervals, as may be necessary for safety. Carefully pick out all other growths as they appear. After-treatment is simply that recommended as applicable when large blooms are desired from pot plants. Keep off green fly and red spider by frequent syringing, and in all cases remove lateral growths and damaged or weakly growths. Even although planted out in a deep rich border, occasional soakings with soot water or liquid manure will greatly assist growth and future flowers if given during the hot, dry weather. Take off the "July bud" and thin out blooming laterals in August or September, as recommended for pot plants, and very fine flowers will be the result. In the beginning of October run up a light timber framework, being careful to allow sufficient head-room for the plants when in bloom. This may be roofed with any odd spare lights or sashes, and the sides and ends may be closed up on cold nights with either strong canvas or bast mats. This protection will be sufficient to ensure the safe development of the flowers. During fine sunny days abundance of air should be admitted, closing up early if symptoms of frosty nights appear. Even plants grown in pots, especially for large flowers or for decorative uses, may be protected in this way should no other convenience for housing them exist. The fine show Chrysanthemums inaugurated at the Inner Temple Gardens by the late Mr. Samuel Broome were protected with old lights and matting supported on a rough timber framework as above described. It is precisely this capacity for growth and floral perfection under difficulties that makes the Chrysanthemum above all others the winter flower for cultivators of all descriptions.

A friend writes as follows on Chrysanthemum growing in the open air: "How of the Japanese Chrysanthemums, grown richly (as in Celery trenches, say); leaves kept full and vigorous, and then just as the cold came down, slip a light clear house over them in front of a wall or elsewhere? I have little doubt of a new charm; of course no pots and abundant water, with mulching if need be, and death to spider, &c.? I mean to secure the finest bloom—not merely what one may have out of doors in an ordinary way."

CHAPTER VIII.

EARLY AND LATE FLOWERING CHRYSANTHEMUMS.

These early blooming Pompons or summer liliputian varieties are a great gain; even under ordinary hardy herbaceous plant culture in the open border they are invaluable for cut flowers or outdoor decorative uses. They are yearly being more and more improved in size and in colour and have a great future before them. No garden, however small, should be without a few of the best varieties. A good mode of culture is as follows: "Four cuttings are inserted in a 3-inch pot in a compost of cocoa fibre, a little light soil, and plenty of silver sand. I always use plenty of fibre in my cutting pots, as I find that the cuttings root in it quickly. The pots are then watered with a fine rose and plunged up to their rims in cocoa fibre in a cold frame and kept shut up close, which keeps them from flagging. In the time of frost the frames are banked up outside with short litter, and the glass is covered with matting. When the plants are rooted they are potted singly in 3-inch pots in soil made up of a mixture of loam and leaf-mould, instead of the cocoa fibre, with enough silver sand to keep the whole porous. When the plants are about 5 inches or 6 inches high, the extreme point is taken off; this will cause them to throw out some shoots, which in their turn must be pinched when about 4 inches long. As soon as the roots feel the sides of the pots they should be potted into 4½-inch pots, and when established in these pots they should be again pinched. As to the time for final potting and the size of pot for flowering the plants in, all depends upon the size of plant required and also the time when they are wanted in bloom. If the plants are wanted in bloom about the end of June, they should be finally potted not later than the beginning of May, and 6-inch pots will suffice, but of course the plants will not be so large as those that are potted into 8-inch or 9-inch pots and kept pinched till the end of June. In the spring, after all danger of frost is past, the plants should be placed in an open situation out-of-doors, and carefully attended to as to watering, for if they are allowed to get too dry and flag, they will lose their foliage and look unsightly. After the bloom buds appear, an occasional watering with liquid manure will be of benefit. Care should be taken to keep the plants free from insects, and they should be syringed overhead in the summer at least twice a day. Good plants for window or conservatory decoration can be obtained from cuttings struck from February till April, and grown on as above described. Madame C. Desgrange, sulphur and white, and La Petite Marie, dwarf white, should be grown, both being distinct and good. The following will be found a good collection: Salter's Early Blush; Chromatella, orange, tipped red; Delphine Caboche, reddish mauve; Mrs. Cullingford, white; Frederick Pelé, bronze-red; Golden Button, small canary yellow; Golden Madame Domage, golden yellow; Hendersoni, yellow; Illustration, fine light pink, changing to white; Jardin des Plantes, white; Jardin des Plantes, yellow; Little

Bob, maroon-red; Mme. Pecoul, fine deep rose; Nanum, creamy blush; Précocité, orange-yellow; Souvenir d'un Ami, fine large white, and the different varieties of Cedo Nulli."*

LATE BLOOMING CHRYSANTHEMUMS.—Early blooming varieties of Pompons are a great gain, but scarcely more so than are certain of the large-flowered and Japanese Chrysanthemums which bloom any time after Christmas. Special culture and late pinching may alike be made to favour late blooming, but it is necessary to select the varieties best and most naturally fitted for producing a supply of flowers during January, when flowers, as a rule, are scarce, and so more highly to be prized. If once practical cultivators and those who rear seedling varieties will but turn their attention to the production and special culture of varieties for the purpose here indicated, I see no reason why the season of Chrysanthemums should not last from the end of July until the end of March, even if we do not succeed in engirdling the year with their favourite blossoms.

Among the kinds which have been especially alluded to as suitable for late flowering are the following: Nelly, Bouquet Parfait, Princess Teck, white Incurved; Mr. Gladstone, dark red; Ethel, white Japanese; Saul, The Czar, Julie Lagravère, dark red-brown. Splendens may be had good up to February. Hero of Stoke Newington, a pink sport from Princess Teck; grandiflorum, yellow Japanese; virginale is a good late white Anemone; and old Fleur de Marie is also good; Meg Merrilies is a lemon-yellow or straw-coloured Japanese variety, having long tubular florets gashed open at their apices; this variety gives enormous flowers when well grown, and only opens its blooms about the middle of January; even the small flowers are nice and fringy bits of colour for bouquet work or for vases. Harlequin and Lady Margaret, the former nankeen-yellow, and the latter, a large, white, Anemone-flowered variety, are both of considerable merit for late bloom. Miss Marechaux, a pure white Incurved variety, with thick, waxy-looking petals, is to be recommended as a January blooming kind. So also Khedive and Lamia and Late Duchess, the latter an intermediate form between the Anemone-flowered and the Pompon sections, having pure white flowers, suffused with lemon-yellow in the centre. Grandiflorum, a bright canary-coloured Japanese variety, carries on the flowering season well into February. Mrs. Charles Carey, a variety sent out by Cannell in 1880-1, is an excellent late white, somewhat after the style of James Salter. It is most valuable as a Christmas flower.

Late propagation is one way of obtaining late flowers. Cuttings may be rooted in March, April, or even in May. These may be either planted out on the Celery-trench system of culture, or arranged outside in pots in May or June. If decorative flowers only are desired, pinching or stopping may go on every two or three weeks until the end of July; or, better still, the plants may be cut back to within six inches of the soil during May, June, and July, so as to obtain successional batches and late flowers. As soon as the flower-buds are formed, feed liberally and mulch with rotten manure. By placing them in a north aspect in

* An article by Mr. W. E. Boyce, of Holloway, in *Gardening Illustrated.*

October and November (protecting from frost with canvas or mats), and so keeping them outside until the buds actually show colour, they may be much retarded. After the blooms actually open, a little fire heat with plenty of ventilation night and day preserves the flowers for a much longer period than does subjecting them to cold treatment indoors, which often induces mildew or damping off.

NEW SINGLE CHRYSANTHEMUMS.—"Single Chrysanthemums find admirers." So writes one of our contemporaries, and there is no doubt, from the interest taken in them when exhibited, that this will continue to be the case, and that they will find as much favour as the single Dahlias. They do not interfere with the florists' section either in the one case or in the other, and therefore in neither should we hear disparaging remarks about retrograde movements. The elegant single Dahlias bred at Chelsea between D. coccinea and D. gracilis are not the discarded singles of former days, as some folks seem to think, but a new race in which dwarfness and floriferousness are combined with neat elegant-shaped blooms; and so it will be with the single Chrysanthemums. They will be found to have their uses, and their adoption for these purposes, whatever they may prove to be, need not raise up any opposition to their distribution. These single Chrysanthemums all partake of the habit of growth met with in the Pompons, than which they are still easier to grow. The only difference required in their management is to allow all the bloom buds to remain, for the smaller the flower-heads the more useful are they, and the more highly prized. The single varieties will be found to possess several advantages over the double-flowered sorts for decorative uses. Thus they flower later, and therefore are not so subject to mildew or to damp off. From their open structure the air circulates more freely through the flowers and the sun more readily penetrates the spaces between the florets, so that they hold on more firmly. The flower-heads last fully a fortnight if placed in water after being gathered, and scarcely show any sign of fading within that period. Moreover, many of the varieties throw out lateral shoots which come into bloom at the end of December when flowers are few and precious; and how useful these will prove for decorating the flower vases can readily be imagined. Altogether they have very much to recommend them to notice.

The following sorts, all belonging to what we call the New Departure type, were raised by C. L. Teesdale, Esq., of Chichester:—

"Alice: White, faintly tinted with blush; medium sized flowers. Attraction: Quilled florets of medium length, and of a soft rosy lilac colour. Brunette: Deep reddish chestnut, edged and tipped gold. Coachman: Pearly white, medium sized; yellow disc with a green centre, which gives it a striking and effective appearance; dwarf and very free. Dr. Kellock: Silvery pink shaded lilac; pure white at base of each floret forming a distinct white ring; medium sized, well-formed flowers. Fair Marguerite: White shaded with blush, slightly tinted with yellow at the base; florets somewhat curled. Gus Harris: Fine dwarf habit, forming a perfect specimen laden with medium sized, well-formed flowers of a rosy lilac colour, with distinct yellow disc; quite a gem, and should be included in every collec-

Single Chrysanthemum White Daisy.

tion. Henry Irving: A free-flowering and desirable variety of a beautiful soft rose with silvery shading and clear yellow centre; flowers cupped. Magenta King: Intense magenta, with deep orange centre; florets long. Miss Beckwith: White, shaded with lilac-blush, and broadly tipped with deep rosy lilac; medium sized, lightly cupped; distinct. Miss Cannell: One of the best, the flowers medium sized, finely formed, pure white, with distinct yellow centre, free and effective. Miss E. Terry: One of the finest of the varieties, with long florets of a bright magenta colour and a clear yellow disc; free and fine. Monte Christo: A pretty and distinct variety, deep rosy lilac, with a broad band of pure white round the centre; free. Mr. Toole: Small, well-formed flowers of a clear yellow, very free, distinct and useful. Mrs. Kellock: Large flowers, of a rosy lilac shade, the florets quilled at base of a lighter colour; quite distinct. Mrs. Langtry: A decided acquisition, which will be found very useful for decorative purposes; flowers medium sized, of a pleasing shade of silvery blush; free and effective. Yellow Gem: Bright clear golden yellow, with distinct orange centre; free and showy."

CHAPTER IX.

DISEASES AND INSECTS.

The Chrysanthemum, being hardy and robust in constitution, is singularly free from diseases. When they are housed or sheltered under canvas in October, however, mildew sometimes makes its appearance. Its origin is by some attributed to very cold nights succeeding sunny days, *i.e.*, to great extremes of temperature. Overcrowding the plants and insufficient ventilation is another fertile cause of mildew. The best of all preventives is to stage the plants thinly, allowing each ample space; give abundance of air and keep a morsel of fire burning, especially on cold, wet nights. It must, however, never be forgotten that it is shelter, not heat, that this flower requires. A flue-heated house is best for preserving the dry atmosphere best suited to the preservation of the blooms. Should mildew actually appear, dusting the affected plants with powdered or flowers of sulphur is the best antidote.

Professor Westwood, writing on the insects which infest Chrysanthemums in the *Gardeners' Chronicle* (1881, p. 537), says: "I regret to find that a very large proportion of my Chrysanthemum plants (on which I have for some months past been bestowing a large share of attention) have come blind, the tops of many of the shoots having shown a strong and vigorous foliage—too vigorous, in fact, for the development of flower-buds, whilst many have produced imperfect one-sided buds, instead of the fine round ones which should produce the perfect flowers. How far the peculiar weather of the last six months has caused such effects I cannot determine, but I do

know that, notwithstanding all my care, insects have abounded on my plants, and I have no doubt that in many instances it is to their agency that my failures are to be attributed. Throughout the early summer months I found the perfect cuckoo-spit insect or froghopper very commonly on the young plants, it having been developed earlier in the year from the patches of froth, vulgarly called cuckoo-spit, to be found on many plants, in the midst of which the immature froghopper is to be found. The perfect insect is extremely active, springing off the plant on the slightest motion, so that it is very difficult to be captured. Taking its place on the tenderest part of the plant, it inserts its delicate sucker into the young shoots and arrests their growth.

"Later in the summer the earwigs make their appearance, feeding by night on the tender foliage, and concealing themselves on the return of daylight within the buds, their heads being invariably turned towards the innermost part of the buds, and their tails towards the extremity of the curled-up leaves. This affords an easy mode of catching and destroying them. On taking hold of the folded leaf and the tail of the insect between the forefinger and thumb of the right, the alarmed insect immediately raises its head, which may be seized by the nails of the thumb and forefinger of the left hand, and the insect decapitated. I observed the curious fact that it is almost always the case that the depredators are females (easy distinguished by the much smaller size of the forceps at the extremity of the body; with these females were sometimes associated the immature earwigs, and I have taken as many as seven of these insects in the head of a single shoot, their presence being indicated by the minute black granules of their excrement on the surface of the leaves."

In the *Gardeners' Chronicle*, November 17, 1855, the writer of this article published the description and figure of a species of field or plant bug (Phytocoris campestris, fig. 102) which constantly causes much mischief in the autumn to the Chrysanthemum buds by inserting the extremity of its delicate rostrum (including four very fine bristles) into the buds, and thereby injuring such of the petals as are in part attacked by preventing them from expanding properly and preventing the so much desired regularity in the bloom.

This species has been unusually abundant on my plants this year, and with it have been associated several other kinds of plant bugs having precisely similar habits, and being equally injurious to the plants. One of these, nearly as large as the preceding, is of a delicate pale green colour, which causes it to be observed on the plant with difficulty. This species was named Cimex nassatus by Fabricius. Another species of smaller size is the Cimex (Anthocoris) nemorum of Linnæus, about $1\frac{3}{4}$ lines long, of a black colour and shining, the wing covers of pale whitish yellow spotted with black or pitchy colour; the apical membrane yellowish white, with the middle and end brownish black, and the legs yellow. It is common on trees and bushes from June to October, and hybernates among dry leaves. A greater amount of mischief is committed, however, by a much smaller insect, the Cimex minutus of Linnæus, belonging to the genus Anthocoris and subgenus Triphleps. This little insect insinuates itself quite into the centre of the bud, its minute size rendering it difficult to be per-

ceived, although the black colour of its body and the black triangular patch in the middle of its wing-covers render it quite conspicuous when exposed, or when the bud is gently opened. In its preparatory state it is also equally injurious, and is easily distinguished by a large white patch at the extremity of its rudimentary wing-covers. We believe the same insect occurs in North America, where, from its habits, it has been named Anthocoris insidiatus.

Besides the foregoing insects I have noticed several others on the buds of my Chrysanthemum plants, although of comparative rarity. The common seven-spotted ladybird is one of these, but as this insect is known to be insectivorous, feeding both in the larva and perfect state on plant lice, it may possibly have taken its place on the plant in hopes of finding its usual prey (which has, however, not made its appearance this year on my plants), in the absence of which, I suppose, it would attack the plant bugs above described. The common long-legged harvest spider (Phalangium sp.) has also often been found on the heads of my plants, most probably having got there in search of insects on which it feeds. The caterpillar of the dot moth (Noctua persicariæ) also has been occasionally met with, and must be looked after sharply, as its delicate green colour with the dark lines on its back render it difficult to be easily detected from its similarity to the folded young leaves of the bud.

CHAPTER X.

LARGE SHOW BLOOMS.

On the subject of bud selection for large blooms I quote the following in a recent number of the *Gardeners' Chronicle:* "About London cultivators generally are in favour of growing their flowers upon the terminal bud, meaning thereby the bud actually latest in course of development, but not terminal in the sense intended by the botanist, who uses the word in relation to position, not time; while north-country growers prefer the crown bud, or crown terminal, as it is called about Liverpool. Thus, while one set of plants are growing, making wood, the other set are forming and developing flower-buds, a fact which upon the face of it will clearly account for the difference in the size of the flowers.

"In the interests of the uninitiated we will endeavour to explain these technicalities, and start with the cutting taken in the spring, say in February or March. Cuttings are rooted, potted off, and grown upon one stem until July, in the early part of which month a bud will appear which is called the July bud, and which, if taken, is rarely of any worth—at any rate not as an exhibition flower. In a vigorous growing plant this bud (the terminal bud of the botanist), if it is closely observed after its formation, will be seen to gradually decrease in size, and at the same time three young

shoots, at first not much larger than pinheads, will be seen to come away from below its base. As these shoots increase in length the first bud will disappear altogether, and there will now be three shoots to a single stem. In August another set of buds will appear, which, if properly formed, and the vigour of the plant pretty well expended, should be taken, or, in other words, the growth of the plant should be stopped. Immediately upon the appearance of the bud it will be found that three tiny growths are in process of formation at its base, which would develop into shoots, as before explained, and these should be removed at once if the buds are to be retained.

"The next set of buds appear about the first few days of September, and these are what cultivators call the 'terminal buds,' as undoubtedly, in one sense, they are, being the last effort of Nature after the plant has ceased to make shoots. If, for the sake of argument, we assume that one cultivator disbuds his plants in August, and another one disbuds at a considerably later period, we have a substantial gain on behalf of the former for the process of bud-development. This we consider the simplest way of elucidating the technicalities of the bud business, but the practice is not now generally followed in growing large flowers.

"The system to which we now allude is more intricate in its details, but it offers great advantages to the exhibitor, inasmuch as it gives him a wider selection of buds. It is done in this way. When the plants are about a foot high they are pinched, viz., the extreme points of the shoots are 'rubbed off,' not cut back, as an old hand once sarcastically put it to a young beginner. This early pinching gives a stout stem, and three young shoots break away from the point, all below these being removed as fast as they are formed."

The exhibition stands for show flowers are made of deal $\frac{3}{4}$ of an inch thick, previous to being planed. A stand for twelve blooms is 18 inches wide by 24 inches in length. The holes for the tubes are 6 inches apart from centre to centre, and 3 inches from the sides and ends. They ought to be painted green and varnished. Besides the tubes, wooden cups must be provided, with a stem at the base to be inserted in the water tubes. A hole must be bored with a gimlet through the centre of the stem and into the base of the cup, through which the stem of the flower has to be passed. The stem has to be made secure with a plug passed into the hole upwards. The blooms must be arranged with some regard to harmony of colour, the largest ones in the back row, the medium blooms in the middle row, and the smaller ones in front. Feet, of course, must be fixed at each corner of the stands, so that they are 3 inches high in front and 6 inches at the back.

Dressing the blooms.—On this subject Mr. Douglas, of Ilford, writes as follows: "Those intending to exhibit cut blooms will find it necessary to obtain dressing tweezers. These are made of ivory, steel, or iron. The ivory tweezers are not quite strong enough to remove the badly-formed petals or green scaly substance that is sometimes to be found in the centre of the flowers, so that steel tweezers will have to be provided for that purpose. The ivory tweezers are used mainly for arranging the petals, but one pair made of steel or iron may be used for both purposes. The large-

flowered incurved section is that from which the exhibition blooms are selected, but on careful examination of the various varieties named in this section it will be found that the petals of many of them are irregularly formed, and some of them are badly placed. If we take an incurved bloom as a model, the best for our purpose would be Mrs. George Rundle or the primrose and yellow sports from it. The petals of this variety are sufficiently broad and incurved so as to meet in the centre of the flower, forming what the florist would term a perfect flower; this variety does not require any dressing. John Salter is a large and good flower often seen on stands, but it requires a good deal of manipulation to make it presentable, owing to the number of badly-formed petals in the flowers. It may be added parenthetically that the flowers of this variety and others of the same type come better formed if they open near the glass roof; the worst of the petals must be removed first with the tweezers, and those that remain must be carefully arranged to meet in the centre. Cherub is another type of flower that requires a good deal of work to make an exhibition bloom; unlike John Salter, which is weak in the centre, this variety is generally too full, so much so, in fact, that the outer petals are thrown back sometimes against the stem; in this case the tufts of small petals in the centre have to be torn out, and the wooden cups are used to draw the flower together. Every one of the blooms must be set up in these cups, which are furnished with a stem to fit into the water tubes; there is also a hole through the stem of the cup through which the flower-stem is passed, and the stem must be wedged in to keep the flower in position. Another fault some incurved flowers have is the tendency of some of the petals to reflex; these have to be brought into position by working them through the tweezers. The outer petals are usually the best, and should, if possible, be carefully preserved; when a number of them are removed by decay or for the purpose of improving the flower the chances are much against such flowers winning in a close competition. I would say to an intending exhibitor, first take every pains to preserve the blooms from damp, and thus save the outer petals until the blooms are fully open; secondly, take Mrs. George Rundle as the model of an exhibition flower, and bring the others up to that form by dressing; and thirdly, let no one go away with the idea that badly-grown flowers can be dressed to beat those that are well grown. Good cultivation must go hand in hand with good dressing to obtain the best results."

"Various opinions," says Mr. Moorman, "will always exist on the propriety of this practice. At the present time it would be useless for any exhibitor to stage a collection of undressed blooms against others of equal size and substance that were dressed. Nearly all societies allow flowers to be dressed, which consists, in the case of an incurved flower, of merely drawing out with a pair of tweezers all short, curled, and irregular florets from the centre of the flower, or any part of the flower in which they can be found. The centre of most flowers will be found shorter than the outsides, and by pulling out the short florets a more even outline is produced; the remaining florets are regulated and the blooms placed in hollow wooden cups, in which posi-

tion they are tightly fastened. One point may here be advanced in favour of dressing, that the more a flower is dressed the smaller the bloom is made; therefore, the more substance the flowers contain the better chance the exhibitor has in gaining the premier position; hence the success of the Liverpool growers over the growers in the neighbourhood of London. The incurved flowers of the former are always of better build and contain more substance than the southern growers appear to be able to obtain."

I am informed on good authority that at the Jersey Chrysanthemum Show no dressing is allowed, each bloom being exhibited as it is grown. Formality is not beauty in the eyes of artistic, or even tasteful, people, and all that dressing can do for us is to give to the florets a slate-on-a-roof kind of regularity—a stiff formality which does not deserve toleration.

CHAPTER XI.

ON RAISING NEW CHRYSANTHEMUMS.

Mr. A. Forsyth writes as follows in the *Gardener's Magazine*, April 20, 1872:* "New varieties of Chrysanthemums are raised by two methods, in one of which Nature takes the lead, and in the other the initiating agent is man. I shall endeavour to describe both methods, so far as I understand them, after many years' experience and observation, during which it has been my good fortune to submit for public approval a few new Chrysanthemums that have acquired celebrity and well rewarded me for my pains.

"In its native country the Chrysanthemum sheds its seeds naturally and new varieties spring up, as they do amongst all self-sown plants. In this country it never does so, and yet Nature kindly takes care that our collections shall be enlarged, for every now and then a sport occurs, and by this means a novelty is secured. It appears that lilac flowers are the most sportive, and that they frequently change to yellow; that is to say, a plant which should produce lilac flowers will some day, to our delight, present one or two yellow flowers in the midst of those of the proper colour. It appears that nearly all the colours are capable of sporting into white; but it would be difficult to establish any rules, for if we may make a fair generalisation from all we know, it may be pretty safely said that any colour is capable of sporting to any other colour—that is, within the range of colours proper to Chrysanthemums.

"All the four varieties of Cedo Nulli have sprung from one; the form is the same in all, but the several colours are yellow, lilac brown, and white. Bronze Jardin

* Shirley Hibberd, Esq., in sending me this article at much personal self-sacrifice, says: "You will be glad to hear that the writer of this article, Mr. Forsyth, is doing well in New Zealand, and still sticks to the Chrysanthemum." I am glad to hear this, and so will be all true lovers of the Chrysanthemum.

des Plantes came from the good old yellow variety; the Queen of England has sported into six different colours, with some slight change of form too, the Golden Queen being the least perfect amongst them. My Golden Trilby was a sport from the old white Trilby.

"It is not worth while to occupy much space with examples, and I shall not say a word on the philosophy of the change, preferring to confess that, while I am familiar with the facts, I am unfamiliar with their physiological import. The question for the practical man is, having obtained a sport, how to keep it? In order to answer the question satisfactorily, I must be particular in what I say. In the case of a sport really worth keeping, the first business is to notice how many terminal shoots produce it, for sometimes the new flowers come in a bunch, though more frequently they appear singly. Mark the branches and cut the flowers, and take off a few fair-sized cuttings from the wood that produced the new flowers, and strike them in a gentle heat with care. Having done this, cut the plant down, leaving uncut the stems on which the new flowers were produced, to obtain from them a good stock of side shoots during the winter for cutting from in February and March. By this course of procedure you will secure a good stock of plants on which, perhaps, in the following season the new flowers will appear, but on which the old flowers may appear instead, and you may just discover that, so far as raising a new variety, all your labour has been in vain—'nothing venture, nothing have.' It may happen that the new flowers appear on a sucker from the root, in which case your chance of success is greater than when they appear on the ripe wood; but it is a lottery, and those who enter to win must take their chance of losing. A neighbour of mine had a fine sport of Queen of Anemones a few years ago, and exhibited at the Stoke Newington Exhibition. He raised a good stock from the wood that produced the sport, but he never saw the sport again, the plants producing flowers of the old sort as if nothing had happened to them.

"It would be unjust to the public for any trader to send out a new variety resulting from a sport without first submitting it to a sufficient proof. The instance just cited will show that in this business we must not count our chickens before they are hatched. It is advisable to grow cuttings of sports in such a way as to ensure the full development of all the flower-buds they form, so as to work them right out, and prove them sound to the core—that is, if they are so. Now, to do this, it is advisable to grow them in a poor soil without stopping, and to train them only so much as will suffice to keep them tidy, and to take care to give them no more pot room than is needful for fair growth, but at the same time taking care not to starve them out of constitution.

"Now, we must consider the method which depends on our own initiation, and in which, while we must, of course, wait upon Nature, she will do but little unless we lead the way. The most distinct varieties are raised from seed, and to obtain seed is a most difficult matter. It may be obtained from China and Japan, but is not a regular article of commerce, and it has been grown in quantity in Italy for the French and English raisers, Mr. Salter having been dependent chiefly on Italian seed for the many new

varieties it was his good fortune to send into the market. The amateur who may be ambitious of growing his own seed will be disposed to ask for advice on the subject, and happily on that subject I can say something practical. There is but one way to secure seed in this country, and that is, to manage the plants so that they will flower in the spring.

"It will occasionally happen that, amongst a lot of plants that have flowered in the usual way and have been cut down and stored in a pit, flowers will appear in the month of March on buds that were dormant in the previous autumn, and that escaped the knife through being on short shoots amongst the suckers. I remember that, in a report in the *Floral World* some years ago, it was stated that a very fair specimen of lilac Cedo Nulli was shown in the school-rooms at Brixton Hill in the month of March, on the occasion of Mr. Hibberd giving a lecture there on the cultivation of the Rose. Now, here we have the whole substratum of the art of raising seed in this country, and will suggest to the ambitious a simple mode of procedure which is likely to result in a very fair production of seed, and, having done so, I will improve upon it and increase its value.

"We will begin with a lot of plants that have been grown to decorate the conservatory. We will allow them to flower, and so far pay no attention to seed-growing whatever. But the instant they begin to look shabby, we are to resort to measures to encourage seed-production. There must be provided an airy greenhouse or a very light shed, or some such place safe from frost and sufficiently lighted to keep the plants in health all the winter. A dry sunny greenhouse is the proper place for them. They are not to be cut down. No; the faded flowers are all to be clipped off close under the base of each by a pair of scissors or finger and thumb —the 'cold steel' to be preferred. Now pack them pretty close, keep them rather dry, and let them have plenty of light and air, and exercise patience. In the course of February and March a lot of flowers will open from buds that were dormant when the proper bloom took place. If you do not get seed from these with the spring sunshine at your command, you will never get seed at all, I fancy, and might as well give up the enterprise as an impossibility.

"Now, we are to improve upon this practice, and the improvement consists in striking cuttings in June, and putting them into $4\frac{1}{2}$-inch pots as soon as rooted, and shifting them to 6-inch pots about the middle of August. They will probably flower very well in November and December under glass, but they will carry a lot of dormant buds with them into the spring season, and should produce seed in plenty.

"But how about hybridising? you will ask. Permit me, in all sincerity and politeness, to say that hybridising the Chrysanthemum is fudge! [Since this was written Mr. John Thorpe has proved the contrary to be the fact.—Ed.] Take your seed as you can get it, and with it take your chance of the crossing Nature has accomplished for your benefit; but do not suppose that anyone less gifted than a magician can manipulate the flowers of the Chrysanthemum with the certainty that we operate on the flowers of Geraniums and Fuchsias. Depend upon it, in the improvement effected by English raisers in the Chrysanthemum there has been very little crossing done by means of the camel's-hair pencil; but no

doubt the cross-breeders of the insect world have laboured for our benefit. At all events, if we compare the best Chrysanthemum of forty years ago with the best of today, the contrast is wonderful, and therefore we may reasonably hope for still further improvements as the reward of our labours.

"The treatment of seedling plants differs from the treatment of cuttings only to this extent, that we want to make sure of their flowering, and care very little indeed about the shape of the plants. Sow the seed as soon as ripe. Pot the plants singly in 2½-inch pots as soon as large enough, and shift on as needful until they are in 4½-inch or 6-inch pots, according to their habit and vigour, and in these comparatively small pots let them flower for the first time. You will, if you are wise, or unless you are wondrously lucky, destroy more than 99 out of every hundred of the stock as soon as the flowers appear. Mr. Salter used to say that for every new Chrysanthemum that he named and sold he destroyed at least 2000. The amateur will feel this to be discouraging, but the truth must be told, and, after all, a fine thing may turn up amongst a score or fifty seedlings—who knows? More than once in the history of floriculture an amateur has sowed one seed and obtained from it a new and sumptuous variety that has made his name famous."

In June, 1873, Mr. A. Forsyth, of Stoke Newington, surprised us all by exhibiting fresh and fully developed Chrysanthemum blooms at South Kensington at one of the R. H. S. meetings. The occurrence of these flowers at such a season was nearly as surprising as it would be to hear the cuckoo at Christmas. There is a tale hanging to these blooms: they were started and grown especially to bloom in early summer, so that seeds might be obtained, for, as is now well known among Chrysanthemum growers, the autumn and winter flowers never produce a single seed. On the other hand, if started late and not allowed to bloom until April or May, seeds are obtainable in England as well as in America, or France, or the Channel Islands. In the United States the climate is especially suitable for seed saving, and ere long we may hope for new varieties, even if not new races, from that country, where the plants bloom quite freely treated as half-hardy annuals.

CHAPTER XII.

CHRYSANTHEMUM SPORTS.

When Mr. Forsyth wrote as above on the Chrysanthemum, he frankly confessed that the causes of the appearance of sports was unintelligible to him. Darwin's works had not then appeared, and botany had not emerged from dusky chaos into the comparatively clear atmosphere of cosmos, as some of us are flattered to think is now the case. Graft hybridism had scarcely been recognised as a fact, and the realities of hereditary and reversion were certainly not seen in visions, even if

dreamed of in dreams. Now, however, we know that culture and cross-fertilisation for ages will destroy the fixity of any plant. Again, after a plant has had its fixity broken, or after its characteristics become driven from their permanent or fixed condition—their "angle of repose," so to speak—we begin to obtain a multitude of widely varying individuals when we raise plants from seed. In the case of the Chrysanthemum, this is especially the case in a lot of seedlings; no two are exactly alike. Every new generation is like a turn of the kaleidoscope; the elements the same, their arrangement different. Protean variability is an almost constant result of long-continued cultivation on the one hand and cross-fertilisation on the other. Every plant, every individual having life, has two distinct sets of characteristics: firstly, those which are evident and which can be seen; and, secondly, those which are invisible, or latent, but which may at any time break out or become visible under the influence of certain conditions. The visible characters in one generation may become absorbed or invisible, or partially so, in the next. So also the characters of a former generation may again crop out, just as when we hear it said of a child that he resembles his grandfather or some bygone ancestor of his line. This occurs in plants in two ways, either wholly from seed direct, or by a partial change in an individual, when one bud develops a branch differing from its fellows and which is popularly called a "sport." Such "sports" are mainly originated, and their production facilitated, by culture, aided either by cross-fertilisation or by what is often pretty much the same thing, cross-grafting. Now, if it be true that cross-fertilisation is the cause of variability, one would logically infer that the reverse of variability, or fixity of characters, would result from self-fertilisation, and this much is practically true, for we know that Stocks, Asters, Zinnias, Primulas, and many other flowers can be bred to come true to colour habit, size, &c., with certainty by ensuring self-fertilisation for several successive generations.

Here is the golden rule for all hybridisers to obtain variety—cross-fertilise, and if a good variety, strain, or race be thus obtained, self-fertilise its best and most robust members in order to "fix" the race, and enable it to be obtained true from seed. This rule holds good with all garden or florists' flowers, and the finest of results may be gained by practising it with skill and careful labour.

Mrs. Marigold was a remarkable sport, "a complete tasselled Japanese variety, with pale pink or flesh-coloured florets," from Miss Mary Morgan (see *Gard. Chron.* Dec. 25, 1881, p. 19). At Mr. C. Turner's, of Slough, in 1880, a most remarkable sport appeared on a plant of Mrs. Dixon, half the bloom being of that variety and the other half white, exactly like Mrs. Rundle (*Gard. Chron.* Dec. 4, 1880, p. 731). The florets on the Mrs. Rundle half of the bloom were much broader than those on the Mrs. Dixon, or yellow side of the bloom.

CHAPTER XIII.

CHRYSANTHEMUMS AS CUT FLOWERS.

"WHILE cutting some Chrysanthemum blooms recently," says a correspondent of the *Journal of Horticulture*, "the thought occurred to me that a note on the varieties which are yielding flowers at this season might be useful. The following gave their first flowers—that is, from the end of the leading shoots—Princess Teck and Mr. Gladstone, both incurved; Fleur de Marie, Miss Margaret, and Empress, Anemone-flowered; Cry Kang, Purple Prince, Japanese; and Julie Lagravère, reflexed. The following yielded a second crop of flowers from side shoots, viz., Lady Slade, Venus, Mrs. Shipman, and General Bainbrigge, large-flowered; Criterion, Tokio, Peter the Great, Elaine, Marie Lemoine, Fair Maid of Guernsey, and Bouquet Fait, Japanese; Beauté du Nord, reflexed; Georges Sand, Marginatum, and Princess Louise, Anemone-flowered; Baronne du Prailly, Red Dragon, and some of Cry Kang (Japanese) have yet unopened. Of Pompons, Golden Cedo Nulli, Antonius, President, Perle, Madame Montels, and Mustapha afforded flowers for cutting. Four hundred fresh flowers have been gathered this week, 1200 from Christmas week, and we have still many hundreds to gather as required.

"The Chrysanthemum has occupied a very prominent place for several years in the houses here both as a decorative plant and as a producer of flowers for cutting, nor has it ever been known to fail to respond to our simple treatment, though I should not recommend so many varieties as we have here to gardeners whose sole aim is to procure flowers for cutting, as I have been placed in this position, that variety and large blooms up to the florist standard were as much requisite as the flowers themselves for furnishing purposes. However, were cut flowers alone a requisite, and plenty of them, the varieties I should select would be these—viz., Mrs. George Rundle, Mr. George Glenny, Elaine, Beauté du Nord, Julie Lagravère, Peter the Great, James Salter, and probably Miss Margaret, for very late blooms. If purple flowers were in request, I would add Prince of Wales and Purple Prince.

"With the exception of the cluster of buds at the ends of the main shoots of some of the varieties, I would allow the plants to bear as many flowers as they could. Rich feeding would bring the flowers to a good size. If small flowers are not objected to, some of the Anemone Pompons might be grown; these are very pretty. Golden Cedo Nulli in its way is quite as beautiful as Mr. G. Glenny. Madame Montels is a lovely flower, and Antonius is also worth growing for cut flowers.

"The cuttings may be struck at any time up to May, but December is the time to insert them if the largest possible quantity of flowers is wanted. I employ very little heat, use short healthy cuttings, and when rooted grow the plants in a cool, airy position. I cannot obtain too strong soil for them, nor press it too firmly into the pots, nor injure the plants with liquid manure, when once the roots have a firm hold of the soil."

CHAPTER XIV.

CHRYSANTHEMUMS FOR MARKET.

THE Chrysanthemum is peculiarly suited for what is called "market work"—that is, for culture as a decorative plant to bloom in small pots, or for the supply of cut flowers during November, December, and the beginning of January, at a time when they are a particularly scarce commodity, and so all the more certain of sale at a remunerative price. By growing the dwarf early-flowering kinds a supply may be kept up for three months, or even longer; and as almost the entire growth of such plants may be made in the open air, few plants yield a better profit on the outlay for cultural appliances.

"Were Chrysanthemums grown only for the production of exhibition specimen plants and show blooms," says a writer to the *Gardeners' Chronicle*, "it is very obvious that the culture of this fine race of autumn flowers would be very restricted. The autumn exhibitions, at which the Chrysanthemum is the chief feature, are, as compared with summer shows, comparatively few, the greater portion relatively being found only in the neighbourhood of the metropolis and in large towns. Still further, these particular exhibitions extend over a very limited period of time, at the most, perhaps, a couple of weeks, and just at the present moment we are in the midst of the season. A week ago it began, in another week it will end, and the growers of show Chrysanthemums will retire again for another year into seclusion, till the short but active time of the show period brings them into public notice again. But only the few grow our queen of autumn flowers for exhibition, and the many cultivate her for various decorative purposes. Visits just now to nurseries and to many private gardens, not omitting the famous gardens of the Templars and our public parks, show how the Chrysanthemum displays varied and beautiful decorative qualities—nay, in almost every garden, be it ever so small, we see the favoured autumn flower doing its best to lend beauty when most other flowers have for the season passed away.

"But it is in the market-growing establishments, literally huge manufactories of flowers, that we see the Chrysanthemum in bulk. Here it is grown by tens of thousands, and too often under conditions such as would stagger the humdrum cultivator who has ample glass room at his disposal, and knows nothing of those emergencies which are as familiar to the trade as shifts and privations are to the hungry. We looked in the other day at the Royal Nursery, Feltham, where Mr. Roberts has truly enormous numbers of plants growing under every possible and almost impossible condition. Every inch of space is utilised, whether it be on stage or beneath stage, by the side of walks narrowed now almost to obliteration, and in any and every position there are found Chrysanthemums, both in and out of pots, giving up their beautiful flowers in vast quantities to satisfy the demands of the great flower-loving British public. Of course, we look in vain here for show flowers. One or two growers have devoted houses to their production; not for exhibition, but growing them as show flowers are

grown, for sale in the market. That it is not a very remunerative aspect of Chrysanthemum culture is evident from the fact that few care to embark in their production; but, without doubt, in favourable seasons plants grown naturally to produce naturally developed flowers do pay very well, because the Chrysanthemum is singularly amenable to rough and ready treatment when that most critical period of its culture, the blooming period, arrives.

"But the market grower has the advantage of being able to extend the blooming season far beyond the capacities of the show cultivators. The new late summer or true autumn-blooming race of Chrysanthemums open the season in the month of August, and bring it on to the end of October. Then the older strain of what may properly be termed winter blooming kinds begin their season of flower, which is by them carried right on to the end of the year; so that we have a period of five months, the last months of the year, over which Chrysanthemums florally reign more or less supreme. Owing, no doubt, to those market traditions which always favour decided colours in flowers (whether the public is or is not consulted in this matter we know not), we find in this huge collection of Chrysanthemums that whites, yellows, and crimsons predominate. Thus the season opens with early-struck plants of the soft white and compact-habited nanum and the clear yellow Hendersoni; whilst a handsome addition is being made in Madame Desgrange, a near likeness of the most popular Elaine; but it is dwarf and early, and under glass very pure and beautiful. Then comes the wonderfully floriferous Aigle d'Or, so productive of clear yellow trusses of bloom; a huge patch of this pushed on early in the open ground is there cleared without the necessity of taking any under glass. Elaine is, of course, most abundant. It is seen not only in pot plants trained low to make pretty little specimens, but in thousands of big ones lifted from the open ground and blocked into every available space, and then overflowing into sheds and between the houses, so that all possible shelter may be utilised. It is found that Elaine is in November hardier than in the month of October, when the buds are small and the wood young and sappy. Even 10 deg. of frost have not done so much harm in the open to the buds at this time of the year as 4 deg. would do a month earlier. Elaine is now the white market flower *par excellence* in the esteem of the grower. It is very free, robust, does well; the flowers are of good size, exceedingly pure, and generally elegantly formed, presenting, indeed, a very marked contrast to the formal rotund blooms of Mrs. George Rundle, a variety that, once so favoured, has now been relegated to the background, and which has sinned beyond pardon in giving origin to yellow and sulphur coloured duplicates, which, with their white mamma, are yet unpleasantly prominent at exhibitions.

"Perhaps next to Elaine in popularity comes the pretty, though very full flowered, Mdme. Marthé, because its trusses are so neat and even, and when well developed the flowers are so pure. It is a capital pot variety, as the large number found in the regulation $4\frac{1}{2}$-inch pots show. Of the Anemone-flowered section (for these have their admirers), one of the most pleasing of whites is Lady Margaret, the finest blooms of which will come of great size; and where that is the case they

are sold individually, whilst in all other cases the blooms are sold in big bunches at prices varying from 9s. to 12s. per dozen. Of all white kinds grown for market, or indeed for any purpose, probably none excel in elegance and rare beauty the pretty feather-edged Marabout. This is a true reflexed or tasselled flower of the finest form, rather small than otherwise, and becoming pure white as it ages, though in its developing stage tinted with pink. Marabout is not a free kind, and its habit is not of the best, but its striking and lovely flowers compensate for other defects. Of yellow later kinds the most favoured ones are Jardin des Plantes, rich, free, and robust; Chevalier Domage, bright golden yellow; Peter the Great, pale straw yellow; and Mrs. Dixon—though the latter is mostly grown in pots. Golden Cedo Nulli is also largely grown for the same purpose, as indeed is its older white form, because so dwarf and free.

"The bronze section, a hue of colour so abundant in the Chrysanthemum, is not largely in request. A few sell well at times, and the most favoured kinds are Barbara and Antonelli. Then of crimson hues none excel Julie Lagravère, which is seen everywhere, and is so striking in its rich crimson colouring. Cut in large quantities for bunching, it then becomes wondrously effective, whilst in the gaslight its brilliant hue is intensified. Dr. Sharpe, too, is a very useful and striking kind, though not nearly so free. Of all the intermediate hues, few are more pleasing than is the rosy lilac Adèle Presette, a variety that has a neat dwarf habit, and produces compact trusses of flowers admirably suited for bunching. Of course, late kinds make just now little display. The very latest is the pure white Fleur de Marie, for though so dwarf and full of growth, the flower buds are but just forming, and may be expected to expand about Christmas. Another good late sort is Princess Teck, so well known as a Christmas decorative kind. It is in the production of late or true winter bloomers to which raisers should direct their attention. Kinds that will help to extend the blooming period through the gloomy month of January will, indeed, prove invaluable, not only to the general grower, but specially to the producer for market."

CHAPTER XV.

SELECT CHRYSANTHEMUMS.

A good selection of decorative varieties is a great want on the part of amateur growers. Mr. Samuel Barlow, writing in the *Gardener's Magazine*, says: For the guidance of others I add a list of the plants I have selected and am growing for the coming season's bloom. I have discarded many well-known varieties for their habit of growth, mainly because they are too weak to support the blooms in an erect position; such are Prince of Wales, Dr. Brock, Beverley, and others. The selection is based on twenty years' experience in growing the Chrysanthemum,

carefully noting them each season. The number of plants of each variety indicates the relative positions which they hold in my estimation. The list is fairly representative, and includes all classes and colours, except the very early bloomers:—

Incurved varieties.

10 Mrs. George Rundle
6 George Glenny
6 Mrs. Dixon
6 Pink Venus
6 Blonde Beauty
6 Barbara
6 Empress of India
4 Antonelli
4 Nil Desperandum
4 White Eve
4 Golden Empress of India
4 Lady Talfourd
4 Jardin des Plantes
3 Princess Teck
3 Hero of Stoke Newington
2 Lady Slade
2 Beethoven
2 Lady Hardinge
2 Prince Alfred
2 Little Pet
2 Queen of England
2 Golden Queen of England

Recurved varieties.

6 Sœur Melanie
4 Progne
4 Julie Lagravère
2 Dr. Sharpe
2 President or Dr. Murray
2 Ariadne
2 Jewess

Japanese varieties.

10 James Salter
6 Elaine
2 Peter the Great
2 Fair Maid of Guernsey
2 Ethel

Pompons.

6 Mrs. Dix
6 Argentine
4 Model of Perfection
4 Saint Michael
3 Mdme. Marthé
3 Golden Mdme. Marthé
3 Bob
3 Sainte Thais
3 Golden Sainte Thais
3 Aurora Borealis
3 Snowdrop
3 Miss Wheeler
2 White Cedo Nulli
2 Golden Cedo Nulli
2 Lilac Cedo Nulli

Large Anemone-flowered.

4 Fleur de Marie
2 Glück
2 Miss Margaret

Anemone-flowered Pompons.

4 Madame Montels
4 Jean Hachette
4 Dick Turpin
3 Antonius
3 Mr. Astie
2 Marie Stuart

THE BEST INCURVED, OR LARGE-FLOWERED CHRYSANTHEMUMS.

The following list is the result of a Chrysanthemum election in which many good growers took part, so that the results, as shown by the number of votes each variety obtained, may be taken as approximately correct. It was originally prepared and published in the *Journal of Horticulture*, 1883, p. 110:

Result of the Polling.	1st Class Votes.	2nd Class Votes.	Total.
1. Prince Alfred	61	13	74
2. Golden Empress of India ...	64	9	73
3. Princess of Wales	65	7	72
4. Empress of India	65	6	71
5. Jardin des Plantes	45	25	70
6. Queen of England	50	19	69
7. Barbara	37	30	67
8. Princess of Teck	27	39	66

Result of the Polling.	1st Class Votes.	2nd Class Votes.	Total.
9. Hero of Stoke Newington ...	41	21	62
10. Mrs. Heale	41	17	58
11. Mr. Bunn	31	25	56
12. Lady Hardinge	25	31	56
13. John Salter	41	11	52
14. White Venus	17	32	49
15. Refulgence	32	15	47
16. Nil Desperandum	18	27	45
17. Mrs. G. Rundle	26	18	44
18. Prince of Wales	15	28	43
19. Alfred Salter	26	16	42
20. Venus	9	27	36
21. Mrs. Dixon	11	21	32
22. Cherub	8	24	32
23. Mr. G. Glenny	8	21	29
24. Princess Beatrice	5	24	29
25. Lady Slade	6	22	28
26. Bronze Jardin des Plantes ...	6	21	27
27. White Globe	7	17	24
28. Novelty	7	16	23
29. Mr. Brunlees	6	16	22
30. White Beverley	8	13	21
31. Golden Queen of England ...	11	9	20
32. Eve	7	13	20
33. Isabella Bott	6	14	20
34. Mrs. Haliburton	6	14	20
35. Baron Beust	5	15	20
36. Golden Beverley	4	15	19
37. Empress Eugénie	7	10	17
38. Lord Derby	5	12	17
39. Emily Dale	6	10	16
40. Beauty	5	10	15
41. Mr. Howe	11	3	14
42. Mrs. Shipman	3	11	14
43. Miss Mary Morgan	5	7	12
44. Guernsey Nugget	5	7	12
45. Lady Talfourd	1	10	11
46. Pink Venus	3	7	10
47. Beverley	0	10	10
48. Pink Perfection	2	7	9
49. St. Patrick	1	8	9
50. Mabel Ward	2	6	8
51. Sir Stafford Carey	2	6	8
52. Blonde Beauty	2	6	8
53. Golden Eagle	0	8	8
54. Lord Wolseley	6	1	7
55. Mr. Gladstone	4	2	6
56. Incognito	2	4	6
57. Antonelli	1	5	6
58. Golden John Salter	1	5	6
59. Mr. Cullingford	2	3	5
60. Beethoven	0	5	5
61. Angelina	0	5	5
62. General Bainbrigge	0	5	5

CHAPTER XVI.

NOTES ON FRENCH SEEDLINGS.

The following notes on French seedlings have been kindly furnished by M. Victor Lemoine, the well-known nurseryman and hybridist of Nancy: "I am not actually a raiser of Chrysanthemums, although I grow them rather extensively for commercial purposes, and have sent out some seedlings of merit. One of our earliest raisers of this popular flower was the late M. Lebois, of Toulouse. He it was who effected such a marked improvement in the Pompon or Chusan Daisy race, and the late M. Miellez, a nurseryman of Lille, introduced them to the trade. Since the death of these two enthusiasts this small-flowered race has been somewhat neglected, although Mme. Lebois for some years after her husband's death continued to raise seedlings, which she sent to the late M. Verschaffelt, of Ghent, and several of the finer kinds were figured in *L'Illustration Horticole*. *Bona-fide* raisers who have most distinguished themselves since that time are M. Pertuzés, of Toulouse, and M. Boucharlet aîné, of Lyons, both of whom have sent out some desirable early blooming varieties. M. Charles Huber, of Hyères, for some time turned his attention to raising seedlings, and sent out some good kinds. Some 20 years ago Messrs. Bonamy frères, of Toulouse, effected considerable improvements, but nearly all the raisers above mentioned are now replaced by others, of whom the following are most worthy of note: M. Lacroix, of Toulouse; M. Boucharlet aîné, of Lyons; M. Schwartz, of Lyons; M. Bernard, of Toulouse; M. Marrouch, of Toulouse; M. de Reydellet, of Valence; and above all by M. Délaux, of St. Martin du Couch, near Toulouse. M. Délaux has been most fortunate, and his seedlings continue to improve year by year. One great fault may be found with the southern raisers: They secure fine varieties, but as but little attention is paid to constitutional hardihood, it is often disappointing to find that they do not bloom well in cold localities. The first of the early Pompon race were raised in Paris by the late M. Pelé."

New French Chrysanthemums, 1882.—The Chrysanthemum as a florist's flower was never more popular than it is to-day; as a decorative plant it is more and more extensively cultivated every year. Chrysanthemum exhibitions, the fine displays made in the Temple Gardens and in sundry of the London parks during the autumn months, have shown how easy it is to have a conservatory gay with flowers during the dullest and most foggy time of the year. Quite recently I have read that one of the large conservatories in the Royal Gardens at Frogmore was last season made very attractive by means of hundreds of Chrysanthemums, all of which is most encouraging. In no other country is the Chrysanthemum so well grown as in England, near Liverpool and in London especially, but it is to some of us a source of regret that while we cultivate this plant so well nearly all the new kinds are imported from the Continent, and we hope for the time to come when every grower will save

seed and raise a few new seedlings every year. As it is, most of the new varieties are raised either in the Channel Islands or in France. With regard to those from France I am indebted to M. Lemoine, the well-known horticulturist of Nancy, for the following select list of kinds recently sent out.

1. EARLY-FLOWERING VARIETIES (viz., those which flower from October 15 to November 15).—Alexandre Dufour (Délaux), Japanese, full flower of a rich violet colour; Amarantina (Délaux), Pompon, perfect in shape, purple-amaranth with white points; Curiosité (Boucharlet), Pompon, poppy colour with gold centre; Etincelle (Lacroix), Japanese var., large and very dark crimson tipped with gold; Ile Japonnaise (Délaux), large and very full petals, curled, violet-rose with a light silver tint; Mdlle. Lacroix (Lacroix), Japanese, rosy white changing to pure white; Mdlle. Maney (Délaux), Pompon, very full, delicate rose, the reverse of the petals tinted silver.

2. POMPONS. — Apothéose (Lemoine), flowers full, purple-carmine; Arbre de Noël (Lemoine), flowers very full, brilliant orange tinted with scarlet; Laïs (Lemoine), flowers of medium size, sulphur tipped with gold; La Mascotte (Lemoine), flowers full, reddish brown and violet; La Traviata (Délaux), flowers brownish red tinted with dark scarlet; Lavinia (Lemoine), flowers middle-sized, light violet; M. Robillard (Délaux), late flowering, lilac-rose edged with white; Séduction (Lemoine) flowers full, reddish brown; Volcan (Lemoine), flowers small, mahogany red.

3. LARGE-FLOWERED VARIETIES. —Gloire Lyonnaise (Boucharlet), flowers middle-sized, piped petals, centre white, with reddish brown tips; Grenadière (Boucharlet), flowers large, garnet-red pointed with gold; Jeanne d'Arc (Lacroix), flowers snow white, reverse of the petals lilac; Mdlle. Croizette (Lemoine), flowers dark rose, changing to delicate rose; Mdlle. Madeleine Tezier (De Reydellet), late flowering, perfect in form, snow white, flowers in bouquets; Tragédie (Lemoine), flowers full, violet-rose; Vereschagine (Lemoine), dark rose spotted with purple.

JAPANESE. — Admiration (Lacroix), petals long and tubular, delicate lilac, turning pure white in the centre; Fr. Délaux (Délaux), flowers very large and full, crimson-red, tinted with fiery red, centre curled, reverse golden; Général de Lartique (Délaux), flowers very full, petals curled, fiery red, reverse yellow; J. Délaux (Délaux), flowers full and very large, dark brown, tinted with crimson, reverse gold. Among the Japanese varieties sent out in 1882 several did not flower. This list will be interesting to our own growers, and allow me to suggest that as the same name is now applied not unfrequently to very dissimilar varieties, the *bona-fide* raiser's name be added on the labels of all exhibited plants, as is generally done in the case of the Auricula.

But every year brings us more of these new French varieties. "The cry is, still they come," and although a matter of wonder even to those who know best, yet it is a fact that new colours and additional variety of form succeed each other every season. So prolific, indeed, are the Japanese Chrysanthemums in variety, that one may wonder the less at their having increased in popularity year after year, until it now seems likely that they will oust the stiff and formal Incurved and Pompon varieties from the field, so far

at least as decorative purposes are concerned. Whence come, then, these novel and beautiful varieties? Let us be frank, and say at once, from France! M. Délaux et fils, of St. Martin du Touch, près Toulouse, have for years been raising new kinds of Chrysanthemum, and at the present, without a doubt, they are far ahead of other originators, so far as the weird Japanese varieties are concerned. It must not be supposed that raising new Chrysanthemums is by any means a novel industry at Toulouse, for as long ago as 1826 we learn from the *Revue de l'Horticulture Belge* that Captain Bernet, an amateur of that place, was very successful in originating new sports by intergrafting the then known varieties into each other. As long ago as 1830 the late Donald Beaton recommended intergrafting as a means of inducing "sports," and it is not impossible that some whisper of Captain Bernet's experiments had reached his ears. It seems possible, indeed most probable, that intercrossing was M. Bernet's practice rather than intergrafting. Be that as it may, many amateurs and florists have continued the work which Captain Bernet began, and foremost among these are M. Délaux et fils, who send out from thirty to forty new varieties every year. All lovers of the Chrysanthemum would learn a good deal by a perusal of the annual lists issued by this firm, especially their general catalogue of Chrysanthemums, published in 1882, in which, as a rule, the raisers' names are correctly given. Just at the present moment we have three great centres, in each of which the raising of new seedling Chrysanthemums is carried on. The credit of first place must be given to France and the Channel Islands, the second to England, and the third to America. Apart from European and American enterprise, we shall doubtless receive new seedlings regularly henceforth from China and Japan. Dr. Walcot and Mr. John Thorpe seem to have originated the raising of American seedlings, some of which appear in English catalogues this season for the first time. As a set-off against our American cousins, however, we must point out that Mr. Teesdale, of Chichester, was, I believe, the originator of the new single-flowered race. One result of this extended modern activity in the rearing of seedlings is showing itself in the blending together of old races or distinct sections, such as Chinese, Japanese, and Pompons, and the repetition or clashing of names is also apparent more and more every day. For example, we have now two or three distinct varieties named Ceres, at least two Duchess of Albany, two Arlequins, two Apollos, two Aurora Boreales, and one might go on quoting cases similar *ad infinitum*. If we add this clashing of names to the synonym difficulty, matters are rendered still worse, and it is in difficulties of this kind that the addition of *bona-fide* raisers' names are serviceable, and this is the main reason why they should always be used, as indeed is now the rule when Auriculas or Carnations are exhibited.

A friend who has seen most of the new French seedlings kindly sends me the following account of them, which may be interesting to other amateurs, as it has been to myself: "In my opinion the varieties of Chrysanthemum sent out during these last two years show a marked improvement on the varieties of the preceding years, and seem to give us ground for hope

that Chrysanthemums have still a bright future before them. In France Pompons are being abandoned by degrees, and perhaps also large-flowered old kinds, while every one prizes the newer and more singular forms of the Japanese flowers; wherefore the number of these last-named varieties is always increasing and taking the room of the others.

"VARIETIES OF 1883 AND 1884.—The best Pompon flowered kinds are in order of decreasing merit: Anaïs (Délaux), fringed, rosy lilac and white, with golden tips; laciniatum superbum (Délaux), fringed and laciniate, delicate violaceous rosy hue, with golden tips; Mademoiselle Darnaud (Délaux), purple rosy, golden tipped; M. Luquet (Délaux), early, small purple-violet-coloured flower; Élégant (Délaux), copper-red; Perfection (Délaux), brownish red, yellow tipped; Mademoiselle Mathilde Raynaud (Délaux), rosy carmine, with silvery tips and yellow centre. Large-flowered: Freycinet (De Reydellet), tubulated florets of a beautiful rosy white hue, with yellow shades; Pietro Diaz (Lacroix), velvety brown, with golden reflexes; V. Lemoine (De Reydellet), late flowering amaranth-coloured kind; Président Lavallée (Pertuzés), intricate purplish red; Cimbale d'Argent (Pertuzés), white tinted with pale yellow; Val d'Andorre (Pertuzés), orange-red; Gaillardia (De Reydellet), late Incurved, deep maroon, golden tipped; Belle Valentinoise (De Reydellet), Anemone-flowered, canary-yellow. Early Japanese: Brunette (Délaux), rust-red yellow-tipped; Madame Deveille (Délaux), white with a creamy shade in the centre, and pink stripes; Mastic (Délaux), large ochre-yellow flowers; Boule d'Argent (Délaux), purplish amaranth, with a silvery ball in the middle; M. Deveille (Délaux), blacky brown with golden centre; M. Henri-Jacotot (Délaux), velvety crimson with yellow tips; L'Or du Rhin (Délaux), spiral florets, bright golden yellow with brown shades; Isidore Féral (Délaux), pink, golden centre; M. Pynaert Van Geert (Délaux), brown, yellow-tipped. Japanese: Madame Boucharlet (De Reydellet), globular flowers, yellow and mahogany; Flamme de Punch (Délaux), brown, with golden shade and golden stripes; Margot (Délaux), pink, buff centre; M. Astorg (Délaux), beautiful white, with pink shade; Bois Rosé (Lacroix), large white flowers with pink shade; M. Moussillac (Délaux), large flower, deep crimson; Helvétie (Délaux), amaranth with a silvery centre; M. Carin (Délaux), violaceous rosy.

"VARIETIES OF 1884 AND 1885.—Pompons: Bouquet Fleuri (Boucharlet), small, globular, poppy-coloured flowers; La Désirée (Délaux), early, imbricate, white shaded with pink; Rubra perfecta (Boucharlet), crimson-purple, late flowering kind. Large-flowered: M. Roux (Boucharlet), buff-yellow; Madame Féral (Délaux), imbricate, silvery pink; Carmen (Délaux), dark red, yellow centre and lips; Incarnata (De Reydellet), blush and white; Japanese: M. John Laing (Délaux), contorted, crimson, grained with yellow; Brise du Matin (Délaux), rosy, white centre with buff shades; Aurore Boreale (Délaux), spiral florets, orange-salmon, golden ball in the centre; M. Comte (Délaux), amaranth and violaceous red; Colibre (Délaux), dark. crimson, golden centre; Fleur des Bois (Délaux), blood-red, golden centre; Emblème (Délaux), contorted, dark crimson, yellow tipped; Beauté des Jardins

(Délaux), contorted amaranth with silvery reflexes; Souvenir du Caire (Délaux), spiral florets, amaranth, rosy white centre; L'Alsace (De Reydellet), deep violet, silvery tipped. Early Japanese: Galathée (De Reydellet), irregular, rosy white; Frizon (Délaux), yellow, irregular, and curled florets; Souvenir du Japon (Délaux), pink, shaded buff; Fernand Féral (Délaux), spiral florets, pink, shaded buff. Late-flowering Japanese: Belle Alliance (Délaux), brick coloured, golden centre; L'Or de France (Délaux), contorted, yellow with brown flames; Mdlle. Antoinette Brunel (Délaux), tubular, carmine-tipped white florets; La Géante de Valence (De Reydellet), tubular florets, pink and lilac. The following varieties may be considered as late-flowering ones, for they did not bloom this year in my nursery: M. Léon Brunel (Délaux), Blanche Neige (Délaux), Hébé (De Reydellet), Diane (De Reydellet). All the varieties named above are peculiarly fine and superior to others sent out at the same time. The late flowering kinds are not esteemed by French raisers, who grow their plants out-of-doors and shelter them in cold greenhouses only when frost is likely to prove injurious to the flowers. Perhaps many growers (De Reydellet among them) who reside in the southern departments of France send out every year some late-flowering plant without remarking it, for under their fair climate they are all early and very fine.

"The following new Japanese Chrysanthemums were raised by Délaux et fils, St. Martin du Touch, near Toulouse, and are not as yet distributed: L'Incroyable, fiery cerise, with a gold centre, outer florets quilled, those in the centre spoon-shaped; Le Surprenant, crimson or velvety brown, centre yellow, a very distinct variety with wavy actinoid florets; M. Ivoy, creamy white, with a rosy centre; M. Margottin, reddish crimson, changing to rosy orange, each floret bordered with crimson; M. Dixon, clear rosy violet and white; Mdme. Laing, fiery rose, the florets tipped with silvery white, and flamed and bordered with rose-violet, centre golden; La France, carmine, changing to crimson, centre silvery white; L'Introuvable, amaranth-purple, of velvety texture, centre white; Mdme. Cannell, silvery white, speckled and flamed with rose; Ne Plus Ultra, soft rose, florets shaded with gold and white at the base; M. Davis, blood crimson, with gold-pointed florets; M. Harman Payne, large crimson, flower shaded. The first two varieties in this list are very remarkable in form and colour; indeed, it is not too much to say that they will create quite a sensation when they become well known and are distributed. Among other well-known French raisers of Chrysanthemums may be named M. Lacroix, of Toulouse, M. V. Lemoine, of Nancy, MM. Bernard and Marrouch, of the same place, M. Boucharlet aîné, of Lyons, M. Schwartz, of the latter place, and M. de Reydellet, of Valence. It is very pleasant to see that Messrs. Bull, Barr, and other London seedsmen are now offering seeds of Japanese and other Chrysanthemums. It is also offered by MM. Benary et Cie, of Erfurt, so that there is no reason why seedlings should not be raised in England as well as on the Continent. Now is the time to sow in gentle heat for flowering next November."

JERSEY AND GUERNSEY VARIETIES.—The following is compiled

from original notes and lists kindly furnished by a noted Chrysanthemum grower in Jersey: "Having resided in Guernsey for twenty years, during which time the Chrysanthemum has been an especial favourite of mine, I may say I am personally acquainted with all the raisers in that island, and have seen some thousands of seedlings, some exquisitely beautiful, others, alas! not so attractive from a florist's point of view, and so doomed to be cast aside. The raiser of the first seedling Chrysanthemums in the Channel Islands was a baker, the plants being trained to a wall behind his oven. The varieties of that time were, of course, very different fnom those raised more recently in Guernsey by such men as Clark, Davis, Pethers, and Smith. Mr. Smith has sold as many as sixty new varieties in one year to the late Mr. James Salter, of Hammersmith. These were named and brought out a few at a time, so as not to overstock the market. In Mr. Salter's catalogue a number of them are marked Smith, while many are marked S. only. I recently paid a visit to some old friends in Guernsey, and while there, speaking of Chrysanthemums, they seemed unanimous in thinking that by far the greatest number of the large-flowered varieties in Salter's list were of Guernsey origin bought from the stock of unnamed seedlings. Crimson Velvet was first exhibited by Pethers, and is still one of the best of rich dark-coloured kinds. Among the modern Japanese varieties, several have been raised by Major Carey's gardener, while those two favourites, Elaine and Fair Maid of Guernsey, were raised by Mr. J. Downton, gardener to Mr. Saumarez Carey, of The Grange. The Pompons under the head 'Jersey' in the list annexed were sent by M. V. Langlois and myself to Mr. A. Forsyth, who then lived at Stoke Newington. They were mostly of French origin. Dick Turpin is a Jersey seedling named by the judges at our fourth exhibition, it having been given by the raiser to his postman, J. Turpin. Major Carey now seems almost alone here as a raiser of new kinds from home-saved seeds.

"As to seed-saving, I have observed two methods of treating the plants. A common plan is to train the plants to a sunny wall, protecting them above by a weather board. Here they are left to ripen until the end of January, when the old flower-heads are cut off and the seed separated and saved by rubbing them in silver sand. Others are grown to single stems in pots placed in a greenhouse. February is the best time for seed-sowing, but Mr. Beckford tells me he has sown as late as April, and even then has had blooms the same year. Some years ago I tried the Chrysanthemum seeds advertised by different seedsmen, but never could obtain from them a variety worth keeping; indeed, they resembled Ox-eyed Daisies more than anything else. Not having attempted raising seedlings of late years, it is quite possible that the seeds now advertised are of better quality. Mr. Charles Smith, of the Caledonian Nursery, once told me that he regretted having thrown away many single and semi-double varieties that would now be gladly purchased, although totally unappreciated at the time he had them growing and in bloom."

American Chrysanthemums.—Dr. Walcot, of Boston, Mass., has sent me cut flowers of a few of his seedling Chrysanthemums, some of which are very distinct and beautiful. It is also rather surprising to find that these flowers have so much en-

durance, that they reached me after their voyage of 3000 miles almost as fresh as when cut from the plants. The mode of packing especially deserves notice, as being both simple and effectual. Each flower or truss was cut with 6 inches or 8 inches of leafy stem. A little moist cotton wadding had been placed around the severed stem at its base, this being surrounded by a small piece of sheet india-rubber to prevent the wadding from drying too quickly. The flowers and stems so treated were packed in tissue paper in a tin box, the cover or lid of which was hermetically sealed by a film of sheet rubber.

The flowers themselves vary from perfectly single to good double blooms, the colours being singularly brilliant and effective. Two only of those sent are named, these being Robert Walcot, a Japanese kind of a vivid crimson-red tint, each floret being yellowish behind, and George Walcot, a bold flower, with flat or ribbon-shaped florets of a pale rose colour, edged with rosy crimson. No. 3*a* is a pure white flower in the way of White Princess; and a vivid dark crimson Pompon variety, having a yellow centre in the midst of its densely-crowded florets, is quite distinct from anything we have seen before. The single varieties are very bright in colour, and have an elegance of form quite wanting in the double kinds. Dr. Walcot is an amateur cultivator, and will, we hope, be still further rewarded in his culture of the Chrysanthemum. He is, if not actually the first, at least one of the first, of American growers who have treated the Chrysanthemum as an annual by raising fresh batches from home-saved seeds every spring. It does not appear to be generally known that seed sown in February and grown on with the treatment usually given to cuttings will produce flowering plants in nine or ten months. This is, however, a fact, and one which we hope our own growers will speedily realise for themselves. Although some of the earliest of seedling Chrysanthemums ever obtained in Europe were raised at Oxford many years ago, yet nearly all the kinds now cultivated have been raised in the Channel Islands or in France. The late Mr. Salter used to purchase numbers of unnamed seedlings from the Guernsey growers in his time, and even to-day most of the new Japanese varieties are raised in the Channel Islands. The Pompons and the early or summer-flowering races originated in France, and it is from France that most of the new varieties of these still come to us. These beautiful flowers from Dr. Walcot, however, lead us to hope for great things from America in the way of new seedling Chrysanthemums. In the way of incurved or show flowers, perhaps the old kinds may never be beaten, and wonderful as they are from some points of view, they do not lend themselves very gracefully to artistic purposes, or suit well for decorative uses. As flowers for personal ornament, they are not generally admired. For one lady who will wear blooms of Mrs. G. Rundle, or its sulphur and yellow forms, we find twenty who prefer Elaine or Peter the Great, or who content themselves with the fringed and tasselled Japan kinds. At the same time we decry no particular form. Give us vivid colour; give us variety, elegance of form, and perfume if you can (such as Progne already possesses); in a word, let all tastes be consulted, let all wants be satisfied. There is here a wide and open field for improvement and progress, and the results Dr. Walcot has obtained in his New Jersey garden are so far most en-

couraging. We now more especially desire large-flowered kinds for early blooming out of doors, and even more valuable would be varieties to bloom naturally during January and February. Dr. Walcot has quite recently (Nov. 7) been awarded prizes and certificates of merit for some of his Chrysanthemums in New York, and we cannot do better than let him tell us how he began the raising of the popular flowers. "I began the raising of seedlings some few years ago. Finding that I could procure seeds by keeping my house quite dry, and by giving water to the plants themselves very sparingly, I made some attempts at cross-fertilisation, and am satisfied that I have gained nothing by them; even at this time of the year it is very difficult to keep insects out of my houses, and, with a careful selection of proper plants, I fancy that they will distribute the pollen better than I could hope to do. Growing Chrysanthemums, as I do, for the pleasant occupation of the few leisure hours of a busy life, I have not given them to the trade—they are in the hands of my friends; nor have I done more than exhibit some of them at horticultural shows at Boston and once at New York, when they received medals and certificates of merit. Some of my more recent seedlings are to me so satisfactory, that I am going to send you a few for your opinion." These flowers were sent from Boston on November 24, and reached me on the 5th of December quite fresh, and nearly as beautiful as when cut from the plants. Dr. Walcot also informs me that Mr. John Thorpe, a nurseryman near New York, has also raised this year some seedlings of unusual promise, and with this exception but little or nothing seems to have been effected in Chrysanthemum improvement from American saved seeds. The following is a list of such of Dr. Walcot's seedlings as have been exhibited, and to which awards of merit have been made:—

Seedlings of Dr. H. P. Walcot's raising, 1879—1883: President Parkman (Japanese), plant of robust, compact growth, flowers full, bright rosy purple; President Hovey (Japanese), flowers large, spreading, brown, with salmon tint, white at the insertion of the florets; President Wilder (Japanese), florets red tipped, gold reverse, gold centre, bright yellow; Pontiac (Japanese), same habit and growth as President Parkman noted above, flowers full clear canary yellow; H. L. Higginson (Japanese), flowers medium sized, floret tubular, yellow-brown, extremities flaring and brown-red; Savannah, small flower, brilliant red, bright yellow centre; Hiawatha (Chinese), incurved, rose-violet, with lighter back, good form; Minnehaha, large white flower, backs of petals slightly tinted with pink, finely incurved; George Walcot (Japanese), seedling of 1882; Robert Walcot (Japanese), seedling of 1882. The other flowers in box are from seedlings of 1883.

Two points of especial interest are worthy of note in connection with the above communication. Firstly, we find that a definite and successful beginning has been made in America, and that really fine varieties of Chrysanthemums are now raised there from home-grown and home-saved seeds. Secondly, Dr. Walcot's box of flowers arriving as they did in such perfect freshness and beauty proves to us at once the possibility of a cut-flower trade springing up between England and America, or at least that an interchange of cuttings and fresh specimens may be carried on for horticultural and scientific purposes.

On the same subject Mr. Thorpe,

of New York, writes to me as follows. The subject is Chrysanthemums: "I have the past year or two been raising seedlings, but not until this season (1883) has it been satisfactory to me. A year since I determined to go to work in such a manner as to demonstrate what could be done by strict attention to fertilisation. I selected as seed parents Mrs. C. Carey, Fantaisie, and a variety semi-double Japanese seedling. For pollen parents I used Bras Rouge, Fulton, Fleur Parfait, and Katakanka; the result was enough seed to give me nearly 400 plants, of which over 375 flowered this October and November. The seed was sown the 1st of January, 1883, before eight o'clock in the morning, and I think I began the year well, for out of the lot I must save over 80. How does this compare with Forsyth's statement of Salter not saving over 5 or 6 out of 2000 or 3000? The most remarkable part of the thing is that from these crossings I have every imaginable type of Chrysanthemum known—and some not known—in the following proportion: 8 or 10 Pompons every type, 6 hybrid Pompons (*sic*), a few Chinese reflexed flowers, and a few incurved Chinese, the balance being Japanese. There are among these some of the most lovely single flowers with one ray of petals, others with 3 and 4 rays, others with 5 to 7, of all shades, of all shapes, and of all sizes, some as smooth as single Dahlias, others with petals twisted and curled like ostrich feathers. I shall send you in a few days report of those shown by me at New York, when you will see something about their forms. But what I want to know after such a positive trial is, where are the species? Depend upon it, they are all mere varieties rather than referable to three species. If Gaillardia Lorenziana had been found in our Western States in company with G. picta and G. aristata, it undoubtedly would have been dubbed a species, and this is only one of the hundreds of wide variations originated in gardens."

Mr. John Thorpe has been so good as to send me the following account of American progress in this direction, since the above was written a year ago, which will, I am sure, be of interest to our home florists:—

"Dr. Walcot has priority over myself in the raising of seedling Chrysanthemums, and probably (I make this statement on my own supposition only) he has been raising them for at least seven years. My first attempt at raising seedlings began in 1882, and if my seedlings of 1883 were a surprise, those of 1884 were still more so. I have some entirely new forms, and it would seem we shall soon have to add half a dozen new sections if they are to be kept separate. I will mention four of distinct character that have already appeared. One has rigid tubular petals for three-quarters their length; then they break out into deeply incised lobes, the flowers being about 3 inches over and double; the light strikes entirely through among tubes, thus giving a very distinct effect. Another has semi-double flowers, petals long and loose, and so deeply divided as to be in mere shreds, the disc having a few of these same shreds attached. Another one has petals first tubular, then very flat, and then divided or fringed at the ends. This is single yellow with the outer rays bronze. The fourth is a very thick double flower, white, about the size of Mdlle. Marthé; so much are the petals divided, that they look like

mere threads, yet rigid and lasting. If it was not for the petals being so much divided, this would be really a single flower. Dr. Walcot has sent me some fourteen or more of his seedlings of 1883, and there are two distinct forms among them. One has a row of small guard florets, the centre filled full of flat petals (not florets) like small Hollyhocks. I call this Merrimac. The other has a row of white petals sparsely disposed with a cone-like scaly centre; after the ray petals have been out for three weeks the cone divides and another crop of petals appears, making a poor Fair Maid of Guernsey-like flower. This is of no commercial value. But what does all this infinite variety mean? Where are we being led to? What may we expect next? Where shall we stop?

"That Chrysanthemums can be cross-fertilised I have the most satisfactory proof, the most positive crosses coming from the ray or petal florets. To effect this I simply take a pair of scissors and cut away the petals as soon as the flower begins to open low enough down to expose the stigma; this wants care and some practice, and it requires some little experience to know when to apply the pollen. In 1883 I was very anxious to get some other coloured Gloire de Rayonnante. With this end in view, I set alone two plants in small pots of that variety, each having one flower; these I subjected to the shearing process, and when fit I applied pollen from yellow and white varieties. From these two flowers and from ray florets I had thirty seedlings. One of these is President Cleveland, one Golden Gloire de Rayonnante. I have a fine white one, a deep orange, and a deep pink for next year (some four or five did not flower); these are all of the same early flowering habit and have foliage almost identical with that of Gloire de Rayonnante. From Comte de Germiny, crossed with Viceroy of Egypt, came Sam Henshaw; this was from petal stigmas; others of this cross did not flower. These are all manipulated or artificial crosses.

"Now, I want to talk about the single and semi-double forms. Among these are some truly beautiful varieties. There are but few persons who cannot admire these when seen in perfection. I would be pleased to send you some of these; they are very different from the double forms in general expression—more prolific in flower, and for decorative purposes equal to double kinds. I send you a list of names, and refer you particularly to Mrs. Gubbins, Mrs. Robertson, Jas. Y. Murkland, Mr. W. A. Harris of last year, and to Mrs. Le Moult (this is truly a gem; such colouring, such heads of flower, and such handsome foliage I have not seen); then the Virgin, and last, Sadie Martinot. I see that my old friend 'R. D.' says these American seedlings are coarse. Well, maybe they are not smoothed in a mould or set off by compasses; nevertheless, if I had him here next November I could persuade him to admire them, I know. As to raising seed, I have been singularly fortunate the past season—I mean in getting a quantity. I had the assistance of an industrious insect like the Aster fly to do the pollenisation of the rank and file; the result is I have saved a fair amount of good seed. This fly helped me materially; without its aid it would have been necessary to have gone over the plants each day with a brush or feather. The house has to be kept

dry at all times when saving seed as a matter of course. The only objection I had to this fly was that sometimes in spite of me he would find out where I had hidden some plants that I wanted to cross carefully with my own hands. It is a good many years since Sam. Broome sent to me from London fifty Chrysanthemums, two of a kind, with his book. This was in 1855 or 1856. How I cared for them. The Broome book I knew by heart—simply a case of love at first sight, which has stuck to me through a life of much variation. The impetus given to Chrysanthemums in the United States belongs to Mr. John Thorpe, who has talked and written, and, I need not tell you, aided very practically in their general distribution. The struggle for the front here in floriculture is as great as in Great Britain, though, perhaps, conducted on a different line. The country is more crude and more unkempt, and then we have to pay high wages, and even then we cannot get the same actual experience in our men. Competition is great, and so things are done rather roughly. But I can see we are progressing. We have among us a more appreciative class of patrons than we had even a few years ago, so that we shall soon get a substantial foothold on the right path.

"I will give you just one instance of what a run or boom was three years last November. Mr. Thorpe exhibited a few plants, some fifty or so in ordinary 6-inch pots, of Chrysanthemums. They were admired by a few only here and there at first; then someone had the temerity to say they were beautiful, and by degrees considerable interest was awakened, and when the spark was once kindled, it burnt and spread like lightning. We sold ourselves over 80,000 plants from Jan. 1 to July 1, 1884, and, at the least calculation, there must have been 500,000 sold in the United States, even if not immediately around New York. There seems to be something in the demand, too, more than a fashionable flash-in-the-pan craze, and I expect the Chrysanthemum will have a place with Hyacinths and Tulips, but, of course, at the other end of the year.

"Chrysanthemum shows are being started in every large city with good results, and this year we have already promise of five or six more taking place.

"In a note from 'R. D.' in *The Garden* (Jan. 10, p. 33) I notice he seems to doubt whether Chrysanthemums will flower the first year from seed. Of Chrysanthemum seed sown here by myself between February 1 and April 15, 95 per cent. flowered. Seed sown May 6 by a gentleman at Baltimore flowered most satisfactorily; indeed, they are the most easily managed plants to grow from seed I know, provided the seed is got up in a temperature of not more than 55 deg. Fahr. I plant my seedlings outside in the open ground as soon as safe from frost, say in May, and we dig them up soon after the middle of September and carry them into the greenhouse; some are in pots, and some are placed in earth on the ground, and others are set on benches.

"There is one thing, I think, should be done very soon, and that is to determine to what particular race or section some varieties belong. With me Comte de Germiny and grandiflorum are as truly incurved as are Lord Wolseley, and often more so than Emily Dale, if the latter is not dressed. Again, Striatum Perfectum and Sarnia are as smooth in outline as either Christine or King of Crimsons, yet the

first is Japanese and the other Chinese."

I am sorry to find that there is a falling off in the Channel Islands seedlings—I mean as to their numbers—during the last year or two, but it is to be hoped that such successful raisers as Major Carey and Mr. J. Downton (the raiser of Elaine, a real princess amongst flowers) will not rest on their well-won laurels.

CHAPTER XVII.

HINTS ON EXHIBITING.

Cut blooms that are intended for exhibition will keep fresh longer and look better if cut the evening before the show and placed in cups of water on a cool, moist cellar floor. Intending exhibitors must be especially careful "to read, mark, learn, and carefully digest" the words and meaning of the schedule and regulations of the exhibition or society offering prizes. If the slightest doubt is felt, call upon or write to the secretary of such exhibition or society at once, and gain a clear idea as to what is meant, or disappointment may result, owing to your having unconsciously shown in a wrong class; or you may be disqualified for showing "clusters of flowers as grown" instead of the three best flowers, "clusters or bunches of three," you have on all your plants. The following notes from the *Journal of Horticulture* will explain what is to be guarded against: "At a recent exhibition a class was provided in the schedule for 'twelve Pompons, not less than six varieties, to be shown in bunches of three, with foliage.' The chief prize was awarded to an exhibitor with three individual flowers of each variety. The second prize was awarded to another who staged three trusses of each variety, each bunch of three trusses probably containing over a dozen individual blooms. According to the reading of the schedule, ought not the latter stand to have been disqualified? We state this question in order that our reply may be better understood and of more service generally, as the subject has much more than a personal significance. The second-prize stand referred to could not have been disqualified, as 'bunches' certainly were staged—a 'bunch' meaning a cluster. A number of the same kind growing together, or a number of stems containing single flowers tied together, would form a bunch. In the Kingston schedule the stipulation is 'twelve bunches of Pompons, distinct, three stems as cut to form a bunch (Anemone Pompon and hybrids excluded). Mr. Moorman was rightly adjudged the first prize in this class, each of the stems having six or more fine flowers. According to the extract from the schedule first referred to, the judges might, perhaps, have disqualified the first-prize stand, as blooms, not bunches, of three varieties were staged, but they, no doubt, as judges usually do, exercised their discretion in reading ambiguous conditions.

According to the Kingston schedule, they could neither have disqualified bunches of three single blooms as cut from the plant nor bunches containing several blooms on one stem. Whatever is meant by committees should be stated. Either 'three single blooms to form a bunch,' or 'three bunches of flowers as cut, number of blooms not limited,' would make the matter plain to all."

CHAPTER XVIII.

CHRYSANTHEMUM SOCIETIES.

CHRYSANTHEMUM culture is very frequently fostered and improved by the aid of local societies that are specially devoted to the end in view. It enables cultivators to meet each other in friendly rivalry; new flowers are brought forward; the merits of these, as of older kinds, for certain purposes are brought out and discussed; and visitors to these shows not unfrequently are led to take up the culture of this popular flower by seeing well-grown plants or cut blooms who would otherwise never have thought of it except as a miserable bush tied up to a fence in the open air, or starved and poor in a pot in the greenhouse. The Chrysanthemum is literally the last show flower of the waning year, and deserves notice as coming at a time when decorative plants in bloom are scarce. Wherever two or three or more growers are found in any district, a Chrysanthemum society should be formed, and the interest of the exhibition may well be augmented by holding a fruit and vegetable show in conjunction with the exhibition of Chrysanthemums. The formation and organisation of such a society must be taken in hand by growers and admirers of the Chrysanthemum themselves in this way. They must band themselves into a working committee, and then some nobleman or gentleman popular in the locality must be solicited to allow his name to appear as president, and eighteen or twenty gentlemen who have good gardens must be induced to become vice-presidents. Lady patronesses, treasurer, and hon. secretary must likewise be secured. A subscription list must be opened, and subscriptions solicited from ladies and gentlemen who have gardens in the locality, or who are known to be fond of horticulture. 'Make up your mind to give money prizes, if possible, and nothing conduces more to the long life and prosperity of a flower show of any kind than prompt payments of prizes on the very day the awards are made. The following are the rules of the National Chrysanthemum Society, and may serve as a model for others. In districts like Kingston, Camberwell, Stoke Newington, Highgate, and other suburbs of London, and near Liverpool, where the Chrysanthemum is even more popular, a few extra classes should be added to the schedule here given. Thus prizes might well be offered for the finest new flower or variety of the season in each class or section—Incurved, Pom-

pon, Japanese, Anemone, twilled, reflexed, &c. A special class should be made for seedling kinds raised by the exhibitor. Another for best bridal bouquet of Chrysanthemum flowers (foliage *ad lib.*), best ball-room ditto, and for a vase arranged for the drawing-room. An interesting class might be made for dwarf plants bloomed in 6-inch pots, grown from tops of plants struck late.

The rules and regulations for the exhibition itself must be clear and explicit, and it is the duty of the committee to see that they be carried out by the exhibitors. A little supervision on the morning of the show on the part of one or two members of the committee will often prevent errors on the part of new exhibitors, who in all cases deserve encouragement.

THE NATIONAL CHRYSANTHEMUM SOCIETY.

PREAMBLE.—*The special object of this society is to promote and encourage the cultivation of the Chrysanthemum; to secure, as far as practicable, fair and open competition; and to discountenance, by every available means, any attempt at unfair or fraudulent exhibiting.*

RULES OF THE SOCIETY.

1. The name of the society shall be "The National (late Borough of Hackney, and original Stoke Newington) Chrysanthemum Society."

2. Its business shall be conducted by a president, vice-president, treasurer, honorary secretary, and a committee of not less than thirty-six members (nine to form a quorum), with power to add to their number.

3. Committee meetings shall be held on the first Mondays in February, September, and November, and at such other dates as may be necessary.

4. The annual meeting shall be held in January for the purpose of receiving report and balance-sheet and electing officers for the ensuing year. A general meeting shall also be held in October. An extraordinary meeting may be called at any time on a requisition signed by not less than twenty members of the society.

5. The subscription shall be not less than 5s. per annum, to be paid at or before the exhibition.

6. Persons desirous of joining the society must be proposed by one member, seconded by another, and elected at any meeting. Any candidate rejected at such meeting shall not be eligible for re-nomination.

7. All prize money shall be paid within thirty-one days after the close of the exhibition.

8. No alteration shall be made in any of these rules except at a general meeting, and no member shall move a resolution involving such alteration without having given to the secretary fourteen days' notice of his intention prior to the meeting.

9. The committee shall have power to make such bye-laws and regulations as may be considered necessary.

Ladies or gentlemen wishing to subscribe or become members are

invited to apply to any member of the committee, or to Mr. William Holmes, hon. secretary, Frampton Park Nurseries, Hackney.

REGULATIONS FOR THE EXHIBITION.

1. The exhibition for the present year will be held on Wednesday and Thursday, November 11 and 12, at the Royal Aquarium, Westminster. Exhibitors must send notice to the secretary (in writing) of the classes they intend to exhibit in *three clear days previous to the show.*

2. Non-members of the society must forward to the secretary with their entry a fee of five shillings, which will entitle them to exhibit in any classes for which they may be eligible. No entrance fee will be charged to members of the society except in classes 11, 18, and 52.

3. The committee, in accepting entries from non-members, will strictly adhere to the spirit and letter of the preamble. No exhibitor shall receive two prizes in one class or for one exhibit. The judges are empowered to withhold a prize in any class not considered by them worthy, although there be none better in the class, and also to award extra prizes (special classes excepted) with the sanction of the exhibition committee.

4. Exhibitors are required to have their stands made in accordance with the metropolitan plan, viz., stands for twelve blooms to be 24 inches long and 18 inches wide, with holes 6 inches apart from centre to centre, to stand 6 inches high at back and 3 inches in front. Two "twelve-boards" may be used for twenty-four blooms. The six stands to be same width (viz., 18 inches by 12 inches). All stands to be painted green, and to have the supports secure. No limit as to the size of board in any classes where Japanese blooms are exhibited.

5. Exhibits will be received the evening before and on the morning of the exhibition, but if for competition, must be staged by half-past ten o'clock. No exhibits may be removed until the close of the exhibition, except by permission of the superintendent. All possible care will be taken of exhibits during the exhibition, but any remaining after nine o'clock on the morning following the close of the show must be at owner's risk. No flowers shall have their position altered or be removed from the stands after having been staged.

6. Exhibitors must leave that portion of the building allotted to the exhibition at eleven o'clock, unless officially retained by the superintendent; and no exhibitor will be allowed to bring with him more assistants than are absolutely necessary.

7. Every exhibit must be correctly labelled—groups excepted. Cut blooms must have their names attached to them, legibly written on labels, provided for the purpose by the secretary.

8. All specimen Chrysanthemums must be on single stems, distinct varieties, one plant in each pot, or they will be disqualified.

9. Stems of standard Pompons must not be less than 2 feet, and standard large flowering varieties not less than 2 feet 6 inches from the surface of the mould to the bottom of the head.

10. Plants exhibited in pots other than those in which they are grown will be disqualified; measurement of all pots to be taken 1 inch below the rim.

11. No exhibits shall be labelled "Sold" without the permission of the superintendent.

12. In the fruit classes six apples or pears, and in the vegetable classes nine tubers of potatoes shall form a dish.

13. Dishes will be provided for all fruit and vegetables, except in collections.

14. Competition in the metropolitan classes is open only to those residing within a radius of 3½ miles of Shoreditch Church.

CHRYSANTHEMUMS—OPEN CLASSES.

Class.		1st Prize.	2nd Prize.	3rd Prize.
	POT PLANTS.	£ s.	£ s.	£ s.
1	Group of Chrysanthemums (Japanese varieties only) not less than 20 varieties, arranged in space equal to 60 square feet. Quality and general effect to be the leading features ...	6 0	4 0	2 0
2	Group of Chrysanthemums (Japanese varieties excluded) not less than 20 varieties, arranged in a space equal to 60 square feet. Quality and general effect to be the leading features	6 0	4 0	2 0
3	9 Trained specimens, large-flowered varieties, in not exceeding 12-inch pots	6 0	4 0	2 0
4	4 Standard trained specimens, large-flowered varieties, in not exceeding 12-inch pots ...	3 0	2 0	1 0
5	6 Trained specimens, Japanese varieties, in not exceeding 12-inch pots...	4 0	2 0	1 0
6	4 Trained specimens (large-flowered, Japanese or Pompons), in not exceeding 12-inch pots	2 0	1 0	0 10
7	6 Trained specimens (Pompons) in not exceeding 12-inch pots...	4 0	2 0	1 0
8	Single specimen Chrysanthemum, any form or variety, in not exceeding 12-inch pot ... (The prizes for class 8 have been specially contributed.)	3 0	2 0	1 0
9	12 Plants of Chrysanthemums, incurved varieties, grown for specimen blooms, not less than two blooms on a plant, to be grown and exhibited in Crute's patent concave flower-pot, any size	2 10	1 10	1 0
10	12 Plants of Chrysanthemums, Japanese varieties, grown for specimen blooms, not less than two blooms on a plant, to be grown and exhibited in Crute's patent concave flower-pot, any size ... ... (The prizes in classes 9 and 10 are specially provided by Mr. James Crute, Langton Lodge, Weshall Road, Honor Oak, S.E.)	2 10	1 10	1 0
	CUT FLOWERS.			
11	48 Incurved blooms, not less than 24 varieties, or more than three blooms of one variety ... (An extra entry fee of 5s. will be charged competitors in this class.)	10 0	7 0	4 0

CHRYSANTHEMUMS—OPEN CLASSES (*Continued*).

Class.	Cut Flowers.	1st Prize.	2nd Prize.	3rd Prize.
12	36 Incurved blooms, not less than 18 varieties or more than two blooms of one variety. First prize, the Veitch Memorial medal and £5 ... (Nurserymen excluded from competition in class 12. The Veitch Memorial medal must be awarded only to an exhibit evincing superior culture.)	—	2 0	1 0
13	24 Incurved varieties, distinct	4 0	2 0	1 0
14	18 Incurved varieties, distinct	2 0	1 5	0 15
15	12 Incurved varieties, distinct	1 5	0 15	0 10
16	6 Incurved varieties distinct, for those who have not in any previous year taken a prize for cut flowers of Chrysanthemums	0 15	7/6	0 5
17	6 Incurved blooms, one variety only	0 15	0 10	0 5
18	48 Japanese blooms, not less than 24 varieties, or more than three blooms of one variety ... (An extra entry fee of 5s. will be charged to competitors in this class.)	10 0	7 0	4 0
19	24 Japanese varieties, distinct	4 0	2 0	1 0
20	12 Japanese varieties, distinct	1 5	0 15	0 10
21	6 Japanese blooms, one variety only	0 15	0 10	0 5
22	6 Japanese varieties distinct, for those who have not in any previous year taken a prize for cut flowers of the Chrysanthemum	0 15	7/6	0 5
23	12 Reflexed blooms, not less than six varieties...	1 0	0 10	0 5
24	12 Large-flowered Anemone varieties, distinct (Japanese Anemone varieties excluded) ...	1 5	0 15	0 10
25	6 Large-flowered Anemone blooms, one variety only	0 15	0 10	0 5
26	6 Japanese Anemone blooms, not less than three varieties	0 15	0 10	0 5
27	12 Anemone Pompons, distinct, 3 flowers of each to be shown in bunches, with foliage ...	1 0	0 10	0 5
28	12 Pompons, distinct, 3 flowers of each to be shown in bunches, with foliage	1 0	0 10	0 5
29	24 Bunches single Chrysanthemums, not less than 12 varieties, or 3 trusses in a bunch ... *Note.*—Any method of staging may be adopted by exhibitors in class 29.	2 2	1 1	10/6
30	For the best stand of new Chrysanthemums in 6 distinct varieties ... ... *Note.*—The floral committee will award the medal in this class.	Silver Medal		
31	For best method of staging incurved Chrysanthemum blooms for exhibition, without cups. Not less than 12 incurved blooms, distinct varieties, to be staged; any means of staging may be adopted, with or without boards ...	2 2		
32	For best method of staging Japanese Chrysanthemum blooms, without cups, for exhibition. Not less than 12 Japanese blooms, distinct varieties, to be staged; any means of setting up may be adopted, with or without boards *Note.*—In classes 30 and 31 the right of withholding the prizes is reserved unless a method of general practical value be submitted.	2 2		

CHRYSANTHEMUMS—OPEN CLASSES (*Continued.*)

Class.		1st Prize.	2nd Prize.	3rd Prize.
	AMATEUR CLASSES.			
33	12 Incurved, distinct	1 0	0 15	7/6
34	6 Incurved, distinct	0 15	0 10	0 5
35	12 Japanese, distinct	1 0	0 15	7/6
36	6 Japanese, distinct	0 15	0 10	0 5
	METROPOLITAN CLASSES. (*See regulation* 14.) These classes have been instituted in order to encourage metropolitan growers of the Chrysanthemum.			
	CUT FLOWERS.			
37	24 Incurved, in not less than 18 varieties, or more than two blooms of one variety ...	3 0	2 0	1 0
38	12 Incurved, distinct	1 0	0 15	0 10
39	6 Incurved, distinct	0 10	7/6	0 5
40	12 Japanese, distinct	1 0	0 15	0 10
41	6 Japanese, distinct	0 10	7/6	0 5

Certificates will be awarded at the discretion of the judges to new or rare productions.

A SPECIALLY DESIGNED CERTIFICATE may be obtained by the winner of any prize in the Chrysanthemum classes on application to the hon. secretary.

AN EXHIBITION OF

LATE FLOWERING CHRYSANTHEMUMS

WILL BE HELD AT THE

ROYAL AQUARIUM, WESTMINSTER,

ON WEDNESDAY, JANUARY 13, 1886.

With the view of encouraging the cultivation of late flowering Chrysanthemums, the following prizes are offered for competition, and open to all members of the society. (Non-members must pay an entry fee of five shillings.)

Class.	CUT FLOWERS.	1st.	2nd.
		£ s.	£ s.
1	12 Incurved blooms	2 0	1 0
2	6 Incurved blooms	1 0	0 10
3	12 Japanese blooms	2 0	1 0
4	6 Japanese blooms	1 0	0 10
5	12 Chrysanthemum blooms, any varieties	2 0	1 0
6	Collection of cut Chrysanthemums	2 0	1 0

A third prize of 10s. 6d. will be awarded to either of the above classes having exhibits sufficiently meritorious.

REGULATIONS.

1. No limit as to number of varieties in each class.

2. Entries will be received by the secretary up to the morning of the exhibition.

3. Exhibits must be staged by twelve o'clock, and remain until the close of the exhibition.

4. Every exhibit must be correctly labelled.

5. Exhibitors are at liberty to stage the blooms on boards or any other way they please.

6. Members of the society are entitled to one free pass to the show, and can obtain it on application to the secretary. Extra tickets may also be had, one shilling each.

Further particulars may be obtained on application to the hon. secretary, Mr. William Holmes, Frampton Park Nurseries, Hackney.

AFFILIATION OF LOCAL AND PROVINCIAL SOCIETIES.

GENERAL CONDITIONS.

1. That every affiliated society pay an annual affiliation fee of half-a-guinea.

2. That the medals of the National Chrysanthemum Society be supplied to affiliated societies at *cost price*, also two certificates annually free of charge; and, in addition, each affiliated society shall have the right to elect one of its members to the general committee of the National Chrysanthemum Society, who shall be entitled to two free tickets of admission to the annual exhibition.

Each affiliated society shall be supplied with an official catalogue of Chrysanthemums free of charge for the use of its committee.

3. That the medals, in morocco case, be supplied at cost price as follows: Gold medal, £5 5s.; silver medal, 15s. 6d.; bronze medal, 8s. 6d.; each medal to be 1½-inch diameter.

4. That the society's medals and certificates be awarded only to classes for specimen plants or cut blooms of Chrysanthemums.

5. That those Chrysanthemums bracketed as synonyms in the National catalogue cannot be exhibited on the same stand, and that being so shall be a disqualification in all classes in which the society's medals are offered.

6. Subject to the foregoing regulations, the committee of an affiliated society is at liberty to offer the medals and certificates as they think most advisable.

7. That no society will be considered to have become affiliated until it has received the sanction of the general committee of the National Chrysanthemum Society.

8. That each affiliated society shall pay the amount of the affiliation fee by March 1, and as early in the year as possible furnish the following information to the secretary of the National Chrysanthemum Society:—

1. The number of medals required for the current year.
2. The full title of the society.
3. The name and full address of the secretary or secretaries, and also of the members elected to the general committee of the National Society.

4. The names and winners of the society's medals at the previous year's show, and for what exhibits awarded.
5. The date on which the next show of the society will be held.
6. A copy of the schedule of prizes of the affiliated society to be sent to the secretary of the National Chrysanthemum Society as soon as possible.

CHAPTER XIX.

CALENDAR FOR MONTHLY OPERATIONS.

JANUARY.—Prepare compost of sound red turfy loam, well rotted manure, and sand. Where good suckers or short, stout basal shoots can be obtained, with a few rootlets attached, pot them off singly, picking out all eyes below the soil.

The following directions are, by Mr. Douglas, quoted from the *Gardeners' Chronicle:* "Still continue to take off cuttings if the required numbers were not put in last month. Some varieties are shy in producing suckers, and it is necessary to wait until March sometimes before they are ready. Slugs are troublesome, and eat over a considerable number, but we must search for them at night with a good lamp. Place the pots containing the cuttings over a gentle hotbed. As soon as they have rooted, the young plants may be removed to a frame or cool greenhouse, where air can be admitted more freely than it can be in a frame where cuttings have not formed roots. Some cuttings are so stubborn that it may be necessary to renew the heat for them." Root suckers make the best cuttings. Stem cuttings rush into bud and flower early, and rarely yield good flowers. One good cutting in the centre of a 2½-inch pot is a good way of rooting them.

"The bloom has been rather late this year, but now even the latest varieties are in flower, and the main collection is still in good order. Mildew is a very troublesome parasite; it would, perhaps, be difficult to get a large collection into the blooming state without it. Continue to dust the leaves with flowers of sulphur, and keep it off as much as possible. The only work that can be done now is to attend to the plants with water, and to remove decaying flowers before they injure the others. Some time during this month the cuttings must be put in. I prefer to put one in a small 3-inch pot, using light sandy loam. If very large specimen Pompons are desired, it is quite necessary to put in the cuttings very early in December. The best way to get large specimens of the large-flowered section is to select old plants that have been grown to produce exhibition blooms. Those that have formed from three to six growths 2 inches or 3 inches up the stem are the best. The plants should be taken up, and have nearly all the soil shaken from the roots, and be potted in 6-inch or 7-inch pots. Place them in cold frames, or on a shelf in the greenhouse. Pompons seldom do well treated in that way, but it is best to propagate them from cuttings. Some varieties, including Mrs. Rundle and its forms of the large-flowered section, can be grown into good specimen plants from cuttings put in early." Late sorts will remain in flower until near the end of next

month. Give ample ventilation and a little fire-heat in wet or cold weather. Cut over the old flower-stems of plants which have ceased blooming, and store the plants in cold frames, plunging the pots as a security from frost.

FEBRUARY. — Chrysanthemum seeds may now be sown in pots, pans, or boxes on a slight bottom heat, taking care that, so soon as the young seedlings appear, that they are placed quite close up to the light. Still continue propagation by suckers or cuttings, which will quickly emit roots on a genial hotbed; give air on fine days to prevent damping. Cuttings or suckers already rooted may be potted off and stored in a cold pit or frame; protect with mats in frosty weather; give air freely if mild. If green fly appears, dust with snuff or tobacco powder. A solution of tobacco and soft-soap in warm (80 deg.) water will kill green fly. Plants still in flower should have a little fire heat and ample ventilation. Prepare compost, pots, &c., for forwarding on cuttings next month.

MARCH.—Pot on all early rooted cuttings as they require it. Many fail through allowing the cuttings to become root-bound in the small cutting pots. This is fatal to good blooms. Keep the frames close for a couple of days after potting and shade if the sun is powerful, after which give air whenever possible. Cuttings may still be inserted in heat. Early sown seedlings may now be selected from the seed-pans, each being carefully potted off into a 2½-inch pot in a light compost of leaf-mould, loam, and sand. Place near the light, but shade from hot sunshine, and keep close for a day or two until they establish themselves. Small seedlings may be pricked out in rows in pans or boxes. Seeds may still be sown as before directed. Towards the end of the month the cuttings potted some two weeks ago may be stopped.

APRIL.—Cuttings may still be inserted for late blooming and for ordinary decorative uses. Cuttings potted off last month should have air on all favourable occasions. Syringe morning and evening, and leave air on the frames all night in fine weather. Attend to stopping or pinching and training of "specimen" plants as occasion demands. Harden off plants ready for placing outside next month. Syringing once a week with clear soot water will prevent appearance of green fly and add colour to the leaves. Pot on all strong early rooted cuttings as they require it, and also early seedlings, so as to get them strong and hardy for placing outside next month. Pricked out or potted seedlings may now be brought into cold frames or pits. Remove decayed leaves, stop as may be essential about once every fourteen days, but never immediately before or after repotting. Prepare beds and borders and positions out of doors where pot plants are to be placed.

MAY.—Little or no artificial protection will now be essential for the Chrysanthemum until the plants are sheltered or finally housed in the middle of October. Some plants of each section may be cut down to within 6 inches or 8 inches of the pot for late blooming, and by cutting down some every week until the first week in July a successional supply of flowers is obtainable. Cuttings of the strongest tops rooted now in a cold frame make nice dwarf specimens for small pots in greenhouse or window for November flowering. Place all plants out-of-doors in mild weather. Stop, thin out the shoots, leaving only one to three on a plant where large

blooms are desired. Train specimens, secure or stake the tallest growths to prevent wind-breakages. Watering and syringing must now be performed with punctual regularity. Pot on such plants as require it. Prick off or pot later seedlings. Make open-air plantations and plant the strongest seedlings out at the foot of walls or fences where they are to remain for blooming. Seedlings should be allowed to grow away with one shoot only, and may be planted 9 inches or 12 inches apart. Prepare compost heaps for final shift, and prepare 8-inch and 12-inch pots, crocks or oyster shells for drainage, manure water in tubs or tanks, &c. Provide stakes and trellises for tall plants. Insects, such as green fly, caterpillars, earwigs, "cuckoo spit," &c., will now begin their ravages. Syringe with clear soot water as a preventive. Dust with snuff or tobacco powder, or syringe with tobacco water and soft soap mixture. Earwigs will soon appear and may be entrapped in hollow stalks or in little rolls of brown paper, into which they like to creep for shelter.

JUNE.—As the pots become filled with roots liberal supplies of water will be requisite. Syringe morning and evening, and keep insect pests at bay, as already recommended. All stopping should now be performed for the last time. If aphis is an annoyance, dust the tips of the growths with tobacco powder, snuff, or immerse them in a decoction of soft soap and tobacco. Tie down shoots of plants intended for trained specimens. The most vigorous and forward plants may now be potted for the last time into 8-inch or 10-inch pots. One plant in each pot will give far finer flowers than where root-crowding is induced by placing two or three plants in a pot. Place the plants out in a sunny, airy position and water freely. If the pots are plunged in coal ashes to economise labour in watering, turn them frequently so as to prevent the plants rooting through the bottoms of the pots.

JULY.—Watering will now become the chief factor in Chrysanthemum culture. As the pots become filled, weak manure and soot water must be given every alternate watering. See that tall-growing shoots for production of large blooms are properly supported, or a gust of wind may destroy one's hopes for a season. Where there are three main shoots to each plant they should be secured together by a triangular bast tie; mutual support and protection is thus obtained. See that the earth is pressed down firmly around the edges of the pots in dry, hot weather. The July bud will now appear at the points of the strongest and earliest shoots, and must be at once carefully removed. Two or three shoots will appear from below, and the terminal buds of these shoots produce fine shapely flowers. If green fly appears, dip the tips of the shoots in a solution of soft soap and tobacco, an effectual remedy.

AUGUST.—A mulching of well rotted sheep manure may be given to the tops of the pots during hot weather, and more liberal supplies of liquid manure will also be needful. Never forget that the Chrysanthemum is of all other plants a gourmand. Syringe frequently and watch for green fly. Earwigs and caterpillars will also now be plentiful. Destroy as before advised. Growth will now be in full swing. Cleanliness and watering are the main items of culture. About the end of August or beginning of September the flower-buds begin to show at the

ends of the strong young shoots. Beneath each terminal bloom-bud will be noticed three or four prominent growths breaking from the axils of the leaves immediately beneath the flower-bud. These axillary or side shoots, if allowed to remain, would draw considerable nutriment away from the flower-buds; hence they must be removed while in the bud stage by picking them carefully away with the point of a knife. After removal of these the bloom-buds swell rapidly, and must be assisted by liberal and repeated applications of liquid manure.

SEPTEMBER.—Syringe and water freely; disbudding will also still require attention. Specimen plants will also require tying out with a view to their future effect. High winds must be provided against by careful tying to stakes or wire trellises. Liquid manure of a substantial kind will now be required. First water with clean water, then give a strong dose of manure water, thus enabling it to permeate the entire body of soil in the pot. "Disbudding" and "setting" the buds as directed last month will still be necessary, as the plants vary in forwardness. Specimen plants now require great and continual care in watering and staking. Mildew must be banished by dusting with sulphur. Specimen plants may now be staked, regulating each shoot in its final position. Disbudding as already directed in case of large-flowered kinds.

OCTOBER. — Tying specimen plants and watering are the main operations. Disbudding must also now be continued and insect pests watched carefully, or they will mar the symmetry of some of the finest buds. Secure weakly shoots from rude winds. Feed the plants liberally until the colour shows in the buds. Neglect in timely watering and mildew are a fertile cause of annoyance now among specimen plants. Early flowering kinds must be taken under shelter before the end of this month. Wet and frost are alike fatal to blooms showing colour. Prepare for housing general collection.

NOVEMBER.—Water as before. Withhold liquid manure as the flowers expand. Carefully remove the plants indoors early this month if not already done. Frosts of some severity may now be expected. Give ample room to each plant, and admit air freely. If mildew appears, apply sulphur dusted from a coarse canvas bag. A little fire heat should be applied on cold or wet nights. Early kinds will now be in full beauty. The great fog month is made genial and sunny by the smiles of our "winter queen." Remove all suckers as they appear, retaining rare kinds for next season's growth.

DECEMBER.—At the latter end of last and beginning of present month Chrysanthemum-tide is at its height, and the careful grower is rewarded for his year's labour, that is if he has made it a labour of love. Fire heat should be applied during cold, wet weather, and air freely admitted on all fine days. Any suckers which appear now on good or rare kinds should be removed and potted. Many kinds and some of the finest do not sucker well or even afford good cuttings in the spring. Mind that the plants do not suffer for want of water. Give late blooming kinds a little weak liquid manure and the lightest position possible. Remove dead flowers and leaves as they occur.

GENERAL A B C LIST OF CHRYSANTHEMUMS.

A GENERAL list of the now many varieties of Chrysanthemum has long been a desideratum. The late Mr. Salter's work on "The Chrysanthemum" brought the subject up to 1865, and his book is even yet, and must ever be, considered a noteworthy addition to our written knowledge of this favourite flower. So many new kinds have, however, of late years been added from France and the Channel Islands, that a new list has become absolutely necessary. Although great pains have been taken to make the following as complete as possible, there are, doubtless, sundry little slips and some few omissions; and regarding these the author trusts that his friends will point them out to him, so that emendations may be made from time to time. Wherever possible, names of the actual raisers have been added, such as Davis, Smith, Bonamy, Péle, Délaux, &c.; in other cases the names are those of the nurserymen who have distributed French and Channel Islands seedlings, such as Salter, Veitch, Bull, Dixon, Cannell, &c.

ABBREVIATIONS.

Inc.	Incurved varieties.	*L.fl.*	Large-flowered kinds.
Ref.	Reflexed or Recurved kinds.	*P.ear.*	Early or Summer flowering Pompon varieties.
Ane.	Large-flowered Anemone kinds.	*Pom.s.*	Single-flowered Pompon varieties.
Pom.	Pompon varieties.	*Chin.s.*	Single-flowered Chinese.
P.an.	Pompon Anemone kinds.	*Jap.s.*	Single-flowered Japanese.
Jap.	Japanese varieties.		
J.an.	Japanese Anemone centred varieties.		

ABBÉ DANTIN, *Pom.* — Violet-amaranth, tipped with gold (Délaux)

ABBÉ LAGEZE, *Jap.*—Delicate rose, white centre (Délaux)

ABBÉ PASSAGLIA, *Inc.*—Broad florets of a brassy amber tint (Smith)

ABEL, *P.an.*—Cinnamon and yellow

ACIS, *Pom.* — Pale straw yellow (Salter)

ACQUISITION, *Ane.* — Bright rose-lilac and yellow disc, guard florets broad and regular, centre very high and round, a splendid flower

ADÈLE PRESETTE, *P.f.*—Fringed lilac

ADMIRAL COURBET, *Jap.*—Dark fiery blood colour, very brilliant (Délaux)

ADMIRAL DURMONT DURVILLE, *Pom.*—Brassy nankeen, fine

ADMIRANDA, *L.fl.*—Pink, centre carmine (Délaux)

ADMIRATION, *Inc.*—Light carmine and orange

ADMIRATION, *Pom.* — Perfect button-like flowers of a soft lilac (Schwartz)

ADMIRATION, *Jap.*—(Lacroix)

ADRASTES, *P.ear.*—See Adrastus

ADRASTUS, *P.ear.* — Mauve-purple, fine for open border (September and October), or for early bloom in pots; sure and good

ADONIS, *Pom.*—Rose and white (Boucharlet)

ÆSTHETIC, *Jap.s.* — Purple, yellow centre, long fringed ray florets

AGATHA, *P.an.* — Flowers very full and double, of a bluish pink colour, tipped with gold; a pretty dwarf variety

AGE D'OR, *Pom.*—Yellow, hybrid

AGLAIA, *P.an.*—Blush, white centre

AGRÉMENTS DE LA NATURE, *Jap.* — Flowers large, numerous well-finished petals twisted like a corkscrew, outer ones recurving, those in the centre raised, colour golden yellow, completely shaded and flamed reddish brown, one of the prettiest varieties. (1st class, Hackney, 1882) (Délaux)

AIGLE D'OR, *P.ear.*—Bright canary yellow, hybrid Pompon. Syns., Hebden Bridge and Berrol

AIMÉE FERIÉRE, *Inc.*—Silver white, beautifully tipped rose-pink. See Jeanne d'Arc

AIMÉE MAUREL, *Jap.* — Rose, good and showy

ALARM, *Inc.* — Violet-crimson, finely incurved, good show flower (Clark)

ALBA, *Pom.s.* — Single white (Teesdale)

ALBA FORMOSA, *Inc.*—Good for specimens, dwarf white

ALBA MULTIFLORA, *Pom.*—See Album multiflorum (Salter)

ALBERT, *Jap.*—Reddish crimson flushed with bright red (1882). Syn., Albert de Nurois (Délaux)

ALBERT HELYER, *Inc.*—Large rose-purple, fine flower (Davis)

ALBIN, *Ref.* — Crimson-violet, very fine (Godereau)

ALBION, *Pom.* — White, dwarf and good habit (Boucharlet)

ALBUM PERFECTUM, *Pom.*—(Boucharlet)

ALBUM MULTIFLORUM, *Pom.*—White, slightly yellowish, dwarf, and good for specimens (Salter)

ALBUM PLENUM, *Jap.*—(Délaux)

ALBUM STRIATUM, *Jap.* — Good and showy

ALEXANDER DUFOUR, *Jap.ear.* — Bright violet, reflex dark violet, rich in tint and very distinct (Délaux, 1882)

ALEXANDRE DUFOUR, *Jap.*—Violet, shaded dark violet-purple, dwarf, free and early (Délaux)

ALEXANDER PELÉ, *Pom.* — Salmon bronze or reddish, tipped with gold

ALFONSO, *Ref.*—Distinct, maroon or bright brown, tipped with gold (Bull). Syn., Alphonso

ALFRED SALTER, *Inc.*—Delicate pink, large and finely incurved, grand show flower. See coloured figure in Salter's "Chrysanthemum" (Smith)

ALICE, *Pom.s.*—Blush white

ALIX (Syn., Voltaire).—Rosy carmine, good flower

ALLIETTE, *Pom.* — Magenta-purple (Lebois)

ALMA, *Ref.*—Rose-crimson, very fine (Clark)

ALPHONSE BOIS DUVAL, *Pom.*—Orange-buff

ALPHONSE XII., *Jap.*—Large flower, brick red, shaded with salmon; novel shade of colour (Délaux)

ALPHONSO, *S.fl.* — Crimson-brown, yellow tips (Bull)

AMABILIS, *Inc.*—A soft creamy-rose colour

AMALTHÉE, *Pom.*

AMARANTINA, *Pom.* — Amaranth-purple, shading to snow white (Délaux, 1882)

AMARANTINA CARMINATA, *Jap.* — Bright amaranth tipped with white; a fine flower (Délaux)

AMARANTINA, *Jap.* — Amaranth flamed with white (Délaux)
AMARANTINE, *Pom.* — Lilac-purple (Boucharlet)
AMBROSIA, *Inc.* — Rosy nankeen (Clark)
AMERICA, *Single.*—Opens blush, changing to white (Thorpe)
AMPHILIA, *Ref.*—A most useful and effective variety, flowers of a bright glowing red colour (Bull)
AMPHILLA, *Ref.*—See Amphilia
AMY, *Pom.*—Clear yellow, dwarf habit, fine form and free
AMY, *Pom.*—(Salter)
ANAIS, *P.s.*—Very pretty, fringed, of a rose-lilac colour tipped with gold (Délaux)
ANASTASIO, *P.ear.* — Sub-globose, pink, shaded magenta, fragrant and pretty (Veitch, 1882)
ANATA, *Jap.*—A pure white sport from The Cossack (E. J. Lowe)
ANAXO, *Inc.*—Red-orange, large flower
ANDROMEDA, *P.ear.* — (Durham)
ANDROMEDA, *Pom.* — Cream with brown points (Smith)
ANGEL, *L.fl.* — Florets creamy white, lilac behind, good habit (Lacroix)
ANGELE, *Jap.*—Rosy wine colour with silvery reflex (Délaux, 1884)
ANGELINA, *Inc.*—A bronzy sport from Lady Slade; golden amber, shaded with cinnamon, splendid exhibition flower, has been awarded two first-class certificates in 1882
ANNA DE BELOCCA, *Inc.*—Flowers beautifully imbricated, of a sulphur white colour, very pretty
ANNA DÉLAUX, *Jap.* — Red, chamois, brown and gold (Délaux)
ANNETTE, *Pom.* — Silvery lilac tipped with purple, creamy white towards the centre of the flower, full, and of good form
ANNIBAL, *Pom.*—Violet-rose
ANNIE FORSYTH, *Pom.*—Good dwarf and free, for edgings
ANNIE HENDERSON, *Pom.*—Pale yellow
ANNIE HOLBORN.—Pale lilac, with a white centre (A. Salter)
ANNIE MITCHEL, *Pom.*—Early, bronze carmine or reddish purple
ANNIE SALTER, *Ref.*—"Salter's Annie" delighted exhibitors in 1850, and is yet one of the best of reflexed flowers, of good habit and free; yellow (Smith)
ANNIE THORPE.—New American variety, opening blush and changing to snowy-white, globular flowers (Thorpe)
ANTIGONE, *Inc.*—Fine incurved white
ANTOINETTE ADAM, *P.an.*—Anemone, disc yellow and white, ray snowy white (Bonamy)
ANTONELLI, *Inc.*—Salmon bronze, suffused with orange (Smith)
ANTONIUS, *P.an.*—Small Anemone, yellow with orange centre
ANTHEMIS, *Inc.*—Rosy lilac. See also Themis (Downton)
APOLLO, *Pom.*—Chestnut and yellow Pompon (Smith)
APOLLO, *Jap.*—Good showy orange
APOTHÉOSE, *Pom.*—Full flower, carmine purple
ARABELLA, *Pom.* — Blush (hybrid Pom.)
ARBRE DE NOEL (Christmas Tree), *Pom.*—Full flowers, bright orange, shaded red, beautifully imbricated (Lemoine)
ARC EN CIEL (Rainbow), *Pom.*—(Délaux)
AREGINA, *Inc.*—Amaranth, good late variety. See Inner Temple and Refulgence
ARIADNE, *Ref.*—Cream suffused and tipped with rose (Clark)

ARGENTINE, *Pom.* — Silvery white, very fine, free flowering in wreath-like masses; one of the best for pot culture

ARIANE, *P.an.*—Amaranth and gold centre (Bonamy)

ARIEL, *Inc.*—Lilac blush (Smith)

ARIOSTO, *P.fl.*— A fine flower of an attractive amaranth-crimson colour, slightly shaded with yellow; very dwarf and prettily fringed (Bull)

ARISTÉE, *Inc.* — Delicate lilac, with light centre; fine incurved flower for show

ARLEQUIN, *Jap.*—Crimson red, lined with gold (Délaux)

ARLEQUIN, *Inc.* — Salmon coloured florets. See also Harlequin (Lemoine)

ARTEMIS, *Inc.* — Rose-lilac (Downton)

ARTHUR WORTLEY, *Inc.*— Rosy amber, gold tips (Smith)

ASCANIA, *L.fl.*—Golden yellow, large and double (Lebois)

ASMODÉE, *Jap.* — Petals frilled, rosy yellow, tips yellow, reverse nankeen, flamed with violet-rose (Délaux)

ASMODÉE, *Pom.*

ASPASIA, *Inc.* — Rose-purple (Smith)

ASPASIE, *P.fl.* — Flowers large and very double, white, slightly spotted with yellow; petals very large

ASTALA, *Pom.*

ASTARTE, *P.an.*—Brassy amber

ASTREA, *P.an.*—Lilac blush and gold centre (Smith)

ASTRE DU MATIN (Morning Star), *Ane.*—Lilac-peach

ASTROLABE, *Inc.*—Orange-nankeen

ATARGULLE, *A.fl.*—White, centre yellow, large and fine

ATROPOS, *P.an.*—Reddish crimson

ATROPUS, *Pom.*—See Atropos

ATRO-RUBENS, *Ref.*—Dark red-carmine

ATTILA, *Pom.*—Orange-rose (Lebois)

ATTRACTION, *Inc.* — Large blush, margined rose-pink (Smith)

ATTRACTION, *Pom.s.* — Single rose-lilac, ray florets quilled (Teesdale)

AUGUSTA, *Pom.*—Blush-white, early (Smith)

AUGUSTE MIE, *Inc.*—Red, tipped gold, fine

AURANTIUM, *Jap.*—Golden yellow (Salter)

AUREOLE, *P.ear.* — Lilac-rose, dark chamois in centre, large, free, and early (Boucharlet)

AUREUM MULTIFLORUM, *Inc.* — Bright pure yellow, of medium size and early (Smith)

AURORE.—Yellow-buff, back of petals lilac (Huber)

AURORE.—Very fine, bright orange-coloured flowers of perfect form (Lemoine)

AURORE BORÉALE, *Pom.*— Yellow-buff (Bonamy)

AURORE BORÉALE, *Pom.* — Dark orange (Pethers)

AURORE BORÉALE, *Jap.* — Florets *en spirale*, sunrise red or salmon (Délaux)

AURORE TOULOUSAINE, *L.fl.*—Dark purple (Délaux)

AUTUMNA, *Pom.*—Buff

BABY, *Inc.*—Small, reddish yellow. (Exhibited at Kingston-on-Thames, 1884)

BACCHUS, *Inc.* — Rosy fawn (Salter)

BALMOREAU, *Jap.*—Large flowers, clear amaranth, shaded with violet, tipped with gold (Délaux)

BARABA, *Inc.*—A sport of Barbara, having the outer petals bronze coloured

BARBARA, *Inc.*—Golden yellow, fine show flower

BARON BEUST, *Inc.* — Red-chestnut tipped with gold (Salter)

BARON DE PRAILLY, *Jap.*— Rose-purple and white, large (Prailly)

BARON DE SCALEBERT, *L.fl.* —Rosy lilac, white tips, very double and large (Bonamy)

BARON D'ULIMBERT, .— Purple, shaded with violet (Lebois)

BARON SEABERT, *Inc.*—Light straw

BARRA, *Pom.*—Chamois, shaded with purple, a beautiful flower, with good broad florets, very fine (Bull)

BARTARD, *Inc.*—Orange

BAYARDIER, *Pom.*

BEAUMONT, *Jap.*—Pink florets (Major Carey)

BEAUREGARD, *Inc.* — Dark maroon (Clark)

BEAU SEJOUR, *Jap.* — Violet-carmine, tipped white, very showy

BEAUTÉ DES JARDINS, *Jap.* —Florets twisted, violet or amaranth with a silvery centre (Délaux)

BEAUTÉ DE TOULOUSE, *Jap.* —Rose, softly shading into white, with a silvery reflex (Délaux)

BEAUTÉ DE TOULOUSE, *Jap.* —Pure shining pale rose, large and double (1882)

BEAUTÉ DU NORD, *Ref.* —Not to be confounded with Triomphe du Nord (see Bixio)

BEAUTÉ PARFAIT, *Jap.*—Light rose

BEAUTÉ TOULOUSAINE, *Pom.*—Rosy purple and white, very double

BEAUTY, *Inc.*—Lilac-blush, one of the best of the rosy lilac varieties

BEAUTY OF ST. JOHN'S WOOD, *Inc.*—Creamy white. Syn., Princess of Wales (Henderson)

BEAUTY OF STOKE, *Inc.* — Dark orange, with chamois backs to the florets (Salter)

BEAUTY OF THE NORTH, *Ref.*—Dwarf and early, maroon-crimson (see Bixio)

BEETHOVEN, *Inc.*—Red, with purple reflex, tipped with yellow-bronze. See St. Patrick, Refulgence, and Inner Temple (Rundle)

BELLA DONNA.—Delicate lilac with light centre, incurved (Smith)

BELLE ALLIANCE, *Jap.*—Florets twisted, brick red with golden centre (Délaux)

BELLE CASTILLANE, *Jap.*— Mauve-lilac, pointed with deep buff, very fine flower (Délaux)

BELLE ÉTOILE, *Jap.*—Florets tubular, white-flamed rosy-violet, reverse silvery, centre golden (Délaux)

BELLE FLEUR, *Jap.*—Flower large, soft yellow, flamed with red (Délaux)

BELLE GABRIELLE, *Jap.*— Medium sized flower, very double, of a rich rose-violet, changing to dark purple, reverse of the petals pointed with pure silvery white (Délaux)

BELLE JAPONAISE. — Red crimson, flamed and tipped with gold, very pretty variety (Délaux)

BELLE NAVARRAISE, *Pom.* —Flower Ranunculus-like and fringed. Pure white, suffused with pale rose. Very pretty (Délaux)

BELLE OF JAPAN, *Jap.* — (Major Carey)

BELLE PAULE, *L.fl.* — Snow-white, enormous flower (Pertuzés)

BELLE ROSE, *Jap.* — Dwarf, peach-rose, centre light chamois (Délaux)

BELLE VALENTINAN, *L.fl.*— Pæony-like, canary yellow (De Reydellet)

BERNARD DE RENNES, *Pom.* —Yellowish buff

BENDIGO, *Inc.*—A variety sent out in 1883, and now known as synonymous with Mabel Ward

BEND OR, *Jap.*—Bright sulphur-yellow, large and good (Veitch, 1882)

BERNARD PALISSY, *Inc.* — Bright fiery orange, very distinct (Smith)

BERROL, *P.ear.*—Golden yellow, makes a good specimen. Syns., Aigle d'Or and Hebden Bridge

BERTHILLE, *Pom.*

BERTIER RENDATLER, *Inc.* —Light yellow, flamed and tipped with brownish red, good showy flower (Délaux)

BEVERLEY, *Inc.* — Large ivory white broad petals, fine massive bloom (Smith)

BEVERLEY, GOLDEN, *Inc.*— See Golden Beverley

BEVERLEY, WHITE, *Inc.*—See Beverley

BIJOU, *A.l.*—Bright rosy purple, guard florets broad and stiff, disc high and finely formed

BIJOU, *Pom.*—Clear rose-lilac, a good late bloomer. See also Mon Bijou

BIJOU DE GUERNSEY, *Jap.* —Good and showy (Major Carey)

BIJOU D'HORTICULTURE, *Pom.*—White tinged with sulphur, brown centre on first expansion, good habit

BIJOU TROUVE, *Pom.*—Rose carmine or violet

BISMARCK, *Jap.*—Bright orange or cinnamon, shaded with amber

BIXIO, *Ref.* — Violet-carmine, fine colour. See Beauté du Nord

BLANCHE COLOMBE, *Jap.*— Pure white, flamed with rosy violet

BLANCHE DE CASTILE, *Inc.* —Carnation, shaded dark orange. See also Blanche of Castile (Délaux)

BLANCHE FLEUR, *Jap.*— Beautifully frizzed petals of great length, colour a delicate blush passing to snow-white, a charming large flower, keeps a long time in a cut state (Délaux)

BLANCHE NEIGE, *Jap.*—Large snow-white (Délaux and Bouch-arlet)

BLANCHE OF CASTILE, *Inc.* —Pure white. See also Blanche de Castile (Smith)

BLONDE BEAUTY, *Inc.*— White, tipped pale rose, fine for cutting and late bloom

BLUSH QUEEN, *Inc.* — Very large

BOADICEA, *Inc.* — Rose and cream, large bloom (Clark)

BOB, *Pom.*—Dark crimson-brown, dwarf and good colour, one of the best of its class, and inferior only to Julie Lagravère (Smith)

BOIS ROSE, *Jap.*—A large white flower, with a pinkish suffusion (Lacroix)

BOLIDE, *P.ear.*—A very full and regularly formed imbricated flower of a golden yellow colour (Lemoine)

BOLIDE, *P.ear.*—(Lemoine)

BOLIVAR, *Inc.*—Flowers double and well imbricated, colour ochrous yellow, changing to lilac (Lemoine)

BONNIE ROSE. — Deep rose above, with silvery pink reflex. New American variety

BORDEAUX, *P.ear.* — Sulphur white (Pelé)

BOSSUET, *Inc.* — Rosy carmine, free and fine

BOUCHARLET AINE, *Jap.*— Red-maroon, clear and fiery, with gold points (De Reydellet)

BOULE BLANCHE, *Pom.* — (Délaux)

BOULE D'ARGENT, *Jap.*— Flowers amaranth-purple, centre silver-white (Délaux, 1883)

BOULE DE NEIGE, *Pom.*—Anemone-flowered, snowy white, very fine

BOULE DE NEIGE, *Pom.*—See La Neige (Boucharlet)

BOULE D'OR, *Jap.* — Golden yellow with a red tint (Boulanger)

BOULE DORÉE, *Jap.*—Sulphur yellow, shaded orange (Délaux)

BOULE ROSE, *Pom.*—Rosy lilac

BOUQUET DE FLEURS, *Inc.*—Large dark red (Clark)

BOUQUET DE LA REINE, *Pom.*—White tipped with rose, very free and dwarf

BOUQUET ESTIVAL, *Pom.* or *ear.*—Flowers rather large. Florets frizzed and contorted; colour rose, with a silvery reflex (Délaux)

BOUQUET FAIT, *Jap.* — Immense flowers with twisted florets; colour rich rose and silvery white, with golden centre; very fine (Délaux)

BOUQUET FLEURI, *Pom.* — Small bright rose (Boucharlet)

BOUQUET NATIONAL, *Jap.*—Smallish flower, nankeen colour, tending to rose (Délaux)

BOUQUET PARFAIT, *Pom.*—Clustered blossoms, dwarf and free habit

BOUTON D'ARGENT, *Pom.*—Flowers small, very double, and beautifully imbricated, of a flesh white, the outer turned back, giving it the appearance of a double white Ranunculus (Lemoine)

BRAS ROUGE, *Jap.*—Full dark fiery red, centre golden yellow (Délaux)

BRAZEN MIRROR, *Pom.*—Brassy yellow, liliputian (Pethers)

BRIDESMAID, *Inc.*—White

BRILLIANT, *Pom.* — Crimson-scarlet, good habit, smaller than Bob

BRISE DU MATIN, *Jap.*—Large rose or mauve, centre white or pale chamois coloured (Délaux)

BRONZE, *Inc.*—Bronze, margined with yellow, perfect in form. Also known as Cannell's Bronze (Cannell)

BRONZE DRAGON, *Jap.* — A large flower of a bronzy salmon or copper colour, scented

BRONZE JARDIN DES PLANTES, *Inc.* — Like the type, except in colour, sport

BRONZE JOHN SALTER, *Inc.*

BROWN CEDO NULLI, *Pom.*—Dwarf and free

BROWN CLUSTER, *Pom.* — Dwarf and free flowering

BRUNETTE, *P.an.* — Liliputian Anemone, orange-buff

BRUNETTE, *P.s.* — Single reddish chestnut, tipped with gold (Teesdale)

BRUNETTE, *Pom.*—Good late Pompon, amber, shaded cinnamon (Délaux, 1883)

CADICS PERFECTION, *Pom.*—Bright red

CALIBRI, *Pom.*

CALLIOPE, *P.an.*—Bright ruby red, with full high centre, very fine (Smith)

CAMPISTRONI, *Inc.*—Deep rose (Smith)

CANARY, *P.s.* — Single, clear yellow, orange centre

CANARY BIRD, *Pom.*—Clear yellow (Smith)

CANARY YELLOW CHERUB, *Inc.*—A pure canary or primrose. Yellow sport from Cherub, well built and shapely exhibition flower

CANNELL'S BRONZE, *Inc.*—Good amber bronze. See Bronze Cannell

CANUTE, *Inc.*—Large red, with gold points

CAPELLA, *Pom.* — Dark red-chestnut, with orange centre (Salter)

CAPITAINE MARIGNAC, *Jap.*—Large flower, violet, with white reflex (Délaux)

CAPITAINE NEMO, *P.ear.*—Purplish rose, slightly incurved, early flowering (Lemoine)

CAPTAIN MONTELS, *A.l.*—Salmon-buff

CAPTAIN THOUBAIS, *A.l.*—Disc cinnamon and yellow, ray a light red very large and fine (Bonamy)

CAPTAIN WEBB.—Clear pink (Ware, 1884)

CAPTIVATION, *Inc.* — Cream, shaded rose, fine flower (Salter)

CAPTIVATOR, *Jap.* — Large flowers, red shaded brown (Délaux)

CARACTACUS, *Inc.*—Rose-carmine (Clark)

CARDINAL, *Inc.*—Golden amber, finely incurved; fine for exhibition as cut bloom

CARDINAL WISEMAN, *Inc.*—Bright red-crimson; dwarf compact habit (Smith)

CARDUISIFOLIA, *Jap.s.*—Rich maroon with a yellow centre

CARISSIMA, *Inc.*— Ivory white, pencilled rose (Smith)

CARMEN, *Inc.*—Red tipped with gold, centre golden yellow (Délaux)

CARMEN, *Jap.*—Enormous pure white flowers; a superb variety (De Reydellet)

CARMINATUM, *Pom.*— Indian red, tipped yellow

CARMINATUM ALBUM, *Pom.*—Carmine and white, gold tipped (Délaux)

CARMINEUM SUPERBUM, *Pom.*— Carmine, tipped with gold (Délaux)

CARNOT, *Jap.* — Soft yellow, flamed with red (Délaux)

CAROLINE, *Pom.*

CARPETT, *Jap.*—Deep carmine, bordered white (Délaux)

CASSANDRA, *Inc.*—Ivory white, with rosy tips (Smith)

CASSY, *Inc.*—Orange and rose, fine large flowers (Smith)

CASSY, *P.ear.*

CASTEX DESGRANGE, *J.ear.*—White, with yellowish centre, early and free blooming, dwarf habit (Boucharlet)

CEDO NULLI, *Pom.* — Good white; one of the best in all ways for specimens for show or decoration, very free

CELESTIAL, *Inc.*—White, fine

CENDRILLON, *Jap.* — A full double flower of a rosy lilac colour; reverse of the florets white; a dwarf-growing, early-flowering variety (De Reydellet)

CERES, *Jap.*—Broad ribbon-like florets, white, with primrose centre. Intermediate between Fair Maid of Guernsey and Meg Merrilies; it is a good late variety (De Reydellet, 1st class R.H.S., 1882)

CERES No. 2, *Jap.* — Florets broad, of a delicate pink or peach shade, changing to pure white

CERES (LE), *Pom.*—Deep red tubular florets, bordered and tipped with yellow (Délaux)

C. E. WATERS, *Inc.*—Red and orange, fine show flower

CHAMPS ELYSÉES, *Pom.*—An attractive flower of a rich violet-amaranth colour

CHANG, *Jap.* — Giant flowers when well grown, bronzy red, shaded cinnamon

CHARLEMAGNE, *P.ear.*—Red, early flowering

CHARLES DICKENS, *Pom.*—Flowers large; colour a very deep chrome yellow; the petals of this pretty variety are beautifully tipped with purple (Lemoine)

CHARLES HUBER *Jap.* — Red, yellow tipped, back bronze

CHATÉ, M., *Jap.*—Of a quilled Aster form, peach colour, centre white

CHEDEVILLE, *Pom.* — Reddish crimson and orange

CHERUB, *Inc.* — Golden amber with rosy tint (Smith)

CHEVALIER DOMAGE, *Ref.* —Golden narrow florets, bright and good

CHIEFTAIN, *L.fl.*—Red, tipped gold

CHINAMAN, *Jap.*—Bright violet-purple, centre silvery white; extra fine. Early bloomer if well grown. Messrs. Dixon exhibited it on October 10, 1882 (Dixon, 1882)

CHINOISERIE, *Jap.* — Maroon-red. with gold points (Délaux)

CHRISTIANA, *Pom.* — Canary yellow, with brown points (Smith)

CHRISTIANUM, *Pom.* — Dark violet-rose (Pertuzés)

CHRISTINE, *Ref.*—Rosy blush, fine large flower. Syns., Ne Plus Ultra and Peach Christine

CHRISTINE, GOLDEN, *Ref.*— Yellow or amber

CHRISTINE, WHITE, *Ref.*— White sport of the last. Syn., Mrs. Forsyth

CHRISTMAS NUMBER, *Inc.*— Pure white, good late variety. This is really Princess of Teck

CHRISTOBEL, *L.fl.* — Bronze-rose, fawn centre

CHRISTOPHE COLOMB, *Inc.* —Reddish violet

CHROMATELLA, *Jap.*—Orange and brown (Salter)

CHROMATELLA, *P.ear.*—Golden yellow, shaded orange. In some lists it is called Chrome Stella

CHRYSIPE, *Inc.* — Rose-purple and silver edge

CINDERELLA, *Pom.* — White Liliputian (Salter)

CIRCE, *Pom.* — Lilac, button

CITÉ DES FLEURS, *Jap.*— Florets revolute orange-scarlet or velvety crimson-amaranth; white behind; frizzed florets (Délaux)

CITRONELLA, *Pom.* — Pure clear yellow (Smith)

CLARISSA, *Pom.* — Cinnamon, very full and fine

CLEMENTINE, *Pom.*—A first-rate hybrid variety, producing medium-sized flowers of a rich lemon-yellow colour

CLEOBIS, *Pom.*—Rose, carmine, and white

CLEOPATRA, *Inc.*—Blush, with rosy shade (Smith)

CLEOPATRA, *A.fl.* — Reddish buff

CLEOPHAS, *Pom.*—Yellow, centre orange (Lebois)

CLEOVIS, *Pom.* — Rose, carmine, and white

CLIFTON.—Yellow

CLIPPER, *Inc.* — Carmine and gold (Clark)

CLOTH OF GOLD, *Ref.*—Gold, large flower, good when well grown (Smith)

CLOVIS, *Pom.*—Rose, shading to white

CLYTIE, *Jap.*—Of large size and broad petals, rosy salmon, with incurved golden centre petals, forming a contrast similar to the Cocardeau Asters (Délaux)

COACHMAN, *Pom.s.* — Pearly white, with a yellow disc having a greenish centre (Teesdale)

CŒUR FIDÈLE, *Jap.*—Silvery white, centre rose-violet; a striking contrast. Flowers three or four together (Délaux)

CŒUR-JOIE, *Pom.* — Reddish crimson, base of the florets yellow; distinct (Délaux)

COLIBRI, *Jap.*—Flowers large, crimson or brownish red centre shaded with old gold (Délaux)

COLUMBINE, *L.fl.* — White, shaded rose, fine formed flower

COMÉDIE, *Jap.* — Largé full flowers of a clear bright rose colour (Lemoine)

COMET, *Ref.* — Orange and red, large (Clark)

COMET, *Jap.* — Crimson and gold (Salter, A., 1882)

COMÈTE BIELA, *Pom.*—Finely imbricated, brick red, shaded orange, and tipped with yellow (Délaux)

COMMANDANT BACO, *Jap.* —Flower large, deep salmon red, very beautiful (Délaux, 1881)

COMMANDANT REVIENE, *Jap.*—Florets tubular, chamois yellow shaded purple (De Reydt.)

COMPACTUM, *Inc.*—Peach

COMTE ACHILLE VIGIER, *Pom.*—Pale salmon mottled

COMTE DE GERMINY, *Jap.* —Bright nankeen-yellow, occasionally striped crimson, good (Veitch, 1882)

COMTE DE MORNY, *L.fl.* — Light violet, fine and free

COMTESSE DE BEAUREGARD, *Jap.*—Light rose or bronze-yellow behind; a beautiful flower

COMTESSE DE DERBY, *Inc.* —Also known as Countess Derby

COMTESSE DE GRANVILLE, *Inc.*

COMTESSE DE LA CHARTRES, *Pom.*

CONRAD, *Inc.*

CONSTANCE, *Jap.*—Deep crimson or fiery red, tipped with gold (Délaux)

COOLING'S WHITE, *Pom.*— See Snowdrop

COQUETTE DE CASTILE, *Jap.*—Flowers large, in bouquets, silvery white, suffused with rosy violet, distinct and good (Délaux)

COQUILLAGE, *P.ear.* — Rosy bronze

CORNET, *Jap.* — Crimson and gold (A. Salter, 1882)

COSBI, *Pom.*—Dark carmine (Lebois)

COSSACK, *Jap.*—Reddish crimson and yellow (Veitch)

COUNT CAVOUR, *Inc.* — Rosy carmine (Clark)

COUNTESS DE BEAUREGARD, *Jap.* — Light rose, splendid flower

COUNTESS OF DERBY, *Inc.*— Rose shaded

COUNTESS OF DUDLEY, *Inc.* —Deep lilac

COUNTESS OF GRANVILLE, *L.fl.*—Fine white

COUNTESS OF WARWICK, *L.fl.*—Yellow

CRÉOLE, *Pom.*

CREPUSCULE, *Pom.*

CRIMSON PERFECTION, *Pom.* —A most desirable and effective variety, with beautiful bright crimson flowers, one of the richest and best colours in the Pompon section

CRIMSON KING, *Ref.* — Full, compact flower, of a rich bright chestnut-crimson colour, good. See King of the Crimsons. (Dixon, 1st class R. H. S., 1882)

CRIMSON VELVET, *Ref.*— Beautiful velvet crimson, very rich, requires careful culture (Salter)

CRITERION, *Jap.* — Orange-yellow, a fine flower of good form, dwarf and free

CRŒSUS, *Inc.* — Dark orange-carmine, fine large spherical bloom (Smith)

CROMATELLA, *Jap.* — Long florets, reddish brown (Salter)

CROMATELLA, *P.ear.*—Yellow or orange, tipped with brown, very early (Pelé). Syn., Chromatella

CROUSSE, M., *Jap.*—Indian red, yellow reflex; early, free, and very distinct and curious (Délaux)

CROUSTIGNAC, *Pom.*

CRY KANG, *Jap.*—Rose-magenta, very free

CULLINGFORDII, *Ref.*—Deep, rich, fiery crimson, with a lighter reflex; one of the best in its class. 1st class R. H. S., 1884 (Cullingford)

CURIOSITÉ, *P.ear.* — Lilac and white. Better than Illustration, which it somewhat resembles (Boucharlet)

CURIOSITY, *L.fl.* — Lemon-yellow tipped with brown; very fine and distinct. Synonymous with Madame Bertier Rendatler (Temple Gardens, 1882)

CYBELE, *P.an.*—Anemone, rose-amaranth and gold centre; very distinct

CYCLOPS, *Inc.*—Large orange-salmon (Smith)

DA-GAKKO, *Jap.* — See Da-Jakko (Délaux)

DAIMIO, *Jap.*—Pink, changing to lilac; erect ribbon-like florets

DA-JAKKO, *Jap.* — Large red, with contorted florets (Délaux)

DAME BLANCHE, *Pom.*—White and free. White Lady of some

DANAE, *Pom.* — Bright gold, dwarf, free bloomer; good for specimens (Smith)

DAPHNE, *Inc.*—Sulphur (Smith)

DAPHNIS, *P.an.*—Carmine

DARTAGNAN, *Jap.*—Large rich amaranth, with fiery reflex (De Reydellet)

DEFIANCE, *Inc.*—White, fine

DELICATUM, *Jap.* — Soft lilac, tinged with white; good light variety (Veitch, 1882)

DÉLICES D'AUTOMNE, *Jap.* —A mass of thread-like petals, frizzed, curled and laciniated, of an amaranth-purple colour; intermixed with these are a multitude of finer petals of a snow-white colour (Délaux)

DELIGHT.—See Luteum formosum

DELPHINE CABOCHE, *P.ear.* —Violet, nearest as yet to a blue Chrysanthemum. This is called Miquellon in France. Good free bloomer (Pelé)

DEMOSTHENES, *Inc.*—Red-orange

DESAIX, *Pom.* — Golden yellow (Lemoine)

DESDEMONA, *L.fl.*—Fawn and salmon; very double

DESGRANGE, MADAME C., *J.ear.*—Early flowering Japanese hybrid; good for pots or open air culture, white (1880)

DEUCALION, *L.fl.*—Large rose-pink, early

DIABOLIQUE, *Pom.*—Carmine-rose, frilled petals (Pertuzés)

DIADEM, *Inc.* — Syn., Lucidum, early white

DIAMANT, *Jap.*—Fiery red or crimson, the centre golden (Dél.)

DIAMANT DE VERSAILLES, *A.l.*—Pure white with rosy centre (Smith)

DIAMOND, *Jap.*—Brown and orange tinted, large (Major Carey)

DIANA, *Pom.* — Pure white (Salter)

DIANE, *Jap.* — Lilac-rose, shading to white (De Reydellet)

DICK TURPIN, *P.an.* — Magenta, medium size

DICTATOR, *Jap.* — Red, highly perfumed and good

DIDO, *Inc.*—Sulphur-white, with stiff florets (Smith)

DIOGÈNE, *Pom.*—A beautifully imbricated flower of a showy amaranth colour

DIOGENES, *Pom.*—See Diogène

DISTINCTION, *Pom.*—Blush

DOBREII, *Inc.* — Rose-lilac (Clark)

DOLORES, *Jap.* — Petals very large, same form and same size of flower as Erectum superbum, but entirely distinct in colour, which is a rich violet (Délaux)

DONA ALVA GONZÁLES, *Pom.*—Gold

DONA CARMEN, *L.fl.*—White, fimbriated petals (Lebois)

DONALD BEATON, *Inc.*—Dark orange-red (Smith)

DON ALVA GONZALES, *Pom.*—Yellow, clouded with bright carmine and crimson, fine (Bonamy)

DONNA CARMEN, *P.ear.*—Pure quilled white

DON QUIXOTE, *L.fl.*—Large mottled rosy lilac

DORMILLION, *L.fl.*—Peony shaped, amaranth colour, white behind (Lacroix)

DRACO, *Inc.*—Dark red (Smith)

DRAGON, *L.fl.*—Puce, with light centre (Clark)

DRAGON, RED, *Jap.*—See Red Dragon

DRAGON'S TOOTH, *Jap.*—Rose-purple

DR. AUDIGUIER, *Jap.*—Rich amaranth-crimson, marbled white, reverse of the spiral florets silvery white (Délaux)

DR. BARRIE, *Jap.*—Golden yellow and brick-red (Dr. Audiguier)

DR. BESAUCELE, *Jap.*—Florets tubular yellow (Bonamy)

DR. BOIS DUVAL, *P.ear.*—Carmine-red. Syns., Scarlet Gem and Little Bob

DR. BROCK, *Inc.*—Reddish orange (Smith)

DR. CLOS, *Pom.*—Fine lilac-rose (Lebois)

DR. CREVAUX, *Jap.*—Quilled florets, large, rose, passing off to nearly white (De Reydellet)

DR. HENRY BERNARD, *Jap.*—Reddish copper, or salmon and violet (Lacroix)

DR. HOGG.—Single, rich velvety crimson

DRIN DRIN, *Pom.*—Clear bright yellow, good for cutting

DRINE DRINE, *Pom.*—See Drin Drin

DR. KELLOCK, *Pom.s.*—Single, silvery-pink or lilac, florets white at the base (Teesdale)

DR. LINDLEY, *Inc.*—Dark orange

DR. MACARY, *Jap.*—Pale, broad petalled, rose, shading into white (Délaux)

DR. MACLEAN, *L.fl.*—Mottled rose, fine

DR. MASTERS, *Jap.*—A very distinct and showy variety, with long sword-like florets, opening with a large centre of bright yellow, the exterior being formed of showy red florets, and the centre changing to red as the flower-heads expand, the florets then becoming tipped with gold, one of the best of late flowering kinds. Figured in the *Floral Magazine* (Salter)

DR. ROZAS, *Inc.*—Rose-crimson. Erroneously Dr. Rossa

DR. SHARPE, *Ref.*—Raised in 1864-5, by Mr. G. Harding, then gardener to Dr. Sharpe, Tunbridge Wells, who is said to have crossed Mad. Poggi with Golden Queen of England. Result: seven seeds, all grew, yielding Dr. Sharpe, Mrs. Sharpe, and five worthless varieties. The plants were sold to Mr. Forsyth, then of Stoke Newington, who named and distributed them. It has quilled florets of crimson-purple or rich maroon, backs of florets silvery rose, fine colour, early, and of good dwarf habit. Dr. Sharpe seems of all modern varieties to approach most nearly to the plate in *Botanical Magazine*, c. 327, which represents the first large flowered Chrysanthemum which bloomed in England

DUC DE CONEGLIANO, *Jap.*—Large red, tasselled

DUCHESSE DE GEROLSTEIN, *Jap.*—Large double flowers, parasol shape, large petals, bright rose and white, magnificent (Dél.)

DUCHESSE DE MONTEBELLO, *Inc.* — Syn., Stoke Newington Beauty, delicate rosy blush

DUCHESS OF ALBANY, *Jap.*—A fine large flower with broad petals; pure white except the reverse of the outer petals, which are tinged with pale lilac (Salter and Veitch, 1882)

DUCHESS OF ALBANY, *Jap.*—In the way of Mad. B. Rendatler, with full small florets of the Dragon type, golden tipped, and suffused with reddish brown; late bloomer. 1st class, R.H.S., 1882, Jackson. (Salter)

DUCHESS OF BUCKINGHAM. *Inc.*—Pure white (Salter)

DUCHESS OF CONNAUGHT, *Jap.*—Delicate blush, with beautifully incurved florets

DUCHESS OF EDINBURGH, *J.an.* — Quilled, petals white, recurved disc, rosy lilac (Veitch)

DUCHESS OF MANCHESTER, *Inc.*—White, striped rosy carmine

DUCHESS OF ROXBURGH, *Inc.*—Orange and rose

DUCHESS OF SUTHERLAND, *Ref.* —White

DUCHESS OF WELLINGTON, *Inc.*—Delicate rose, tipped silvery blush (Salter)

DUKE, *Inc.*—Blush

DUKE OF EDINBURGH, *Inc.* —Rose-lilac with lighter centre, very large and finely incurved

DUKE OF ROXBURGH, *Inc.* —Fine yellow

DUKE OF TECK.— Large, rosy mauve suffused with white, a semi-globose flower with incurved florets (Veitch)

DUPONT DE L'EURE, *Inc.*—Orange or amber and carmine

DURUFLET or DURUFFLET, *Pom.*—Rose with carmine centre

EARLY BLUSH, *P.ear.*—Dwarf, vigorous and floriferous, bearing bright rose pink or blush flowers two inches across, one of the best early kinds (A. Salter)

EARLY CASSY, *P.ear.*—Light, tipped lilac

EARLY LATE FLORA, *P.ear.*—Best early yellow Pompon up to date; bright in colour, dwarf, and free grower

EARLY RED DRAGON, *Jap.*—Syn., L'Ile des Plaisirs

EARLY ROSE QUEEN, *P.ear.* —Pretty rosy variety of Japanese aspect

ÉCLATANTE, *Jap.* — Fiery red, with golden points (Délaux, 1881)

ECLIPSE, *Pom.*—Golden, tinged with cinnamon red. 1882

EDITH DOMBRAIN, *Inc.*—Lilac and blush (Smith)

EDOUARD MIELLEZ, *Pom.*

EDWIN LANDSEER, *Ref.*—Rosy ruby, large, very double (Smith)

ELAINE, *Jap.*—Pure white, fine for specimens or cut flowers, becoming lilac with age; fine, early and free; the best for white flowers (J. Downton, gardener to Saumerez Carey, Esq.)

ELEANOR, *Jap.*—Crimson and yellow

ELEGANCE, *Jap.* — Medium-sized flower, very double, petals thin and twisted like a corkscrew, completely curled, dark violet, enlivened with white, centre white, very distinct (Délaux)

ÉLÉGANTE, *Pom.*—Coppery red

ÉLISE, *Jap.*—Tender lilac shaded silver, florets curled and twisted (Délaux, 1884)

ÉLISE CONTE, *Pom.*—Rose-carmine and white centre

ÉLISE LAYELLON, *Jap.*—Sunny rose, with golden centre (Délaux)

ÉLISE MIELLEZ, *Pom.*—Deep rose, fine

ELIZABETH, *Inc.*—Incurved white, extra fine for show

EMBLEM, *L.fl.*—A fine large flower of a light rosy purple colour, very showy and effective

EMBLÈME, *Jap.*—Florets twisted, crimson or fiery red, tipped with gold (Délaux)

ÉMERAUDE, *Jap.*—Large flowers, very long, twisted, drooping petals, the centre petals spiral, of a salmony brick red enlivened with yellow, centre yellow (Délaux)

EMILY, *Inc.*—Delicate blush (Clark)

EMILY, *Pom.*—Rosy bronze (Smith)

EMILY DALE, *Inc.*—Pale yellow or straw coloured; sport from Queen of England

EMMA, *P.ear.*—Rosy purple, early

EMPEROR, *A.l.*—Large blush and sulphur centre (Smith)

EMPEROR OF CHINA, *Ref.*—White and buff colour of silvery texture, a fine distinct thing when well grown

EMPEROR NICHOLAS, *Jap.*—Good and showy (Major Carey)

EMPRESS, *A.l.*—A very large lilac flower, with broad guard florets and light centre (Smith)

EMPRESS EUGENIE, *Inc.*—Lilac, rose, or pink (Pethers)

EMPRESS OF INDIA, *Inc.*—Fine broad florets, pure white; carefully grown it is very fine. Same as Snowball, White Queen, and Mrs. Cunningham

EMPRESS OF INDIA, *Inc.*—Golden, good yellow

EMPRESS OF INDIA, *Inc.*—See White Queen of England

ENAMEL, *Inc.*—Delicate rosy blush, wide incurved florets, very double and free (Salter)

ENCHANTRESSE, *Jap.*—Flowers large and very double, borne in umbels; colour rosy violet, the central florets having a silvery reflex; plant dwarf and early flowering (Délaux)

ENFANT CHÉRI, *Jap.*—Flowers in large panicles, silvery rose, shaded with carmine (Délaux)

ENSIGN, *Inc.*—Insigne, which see (Veitch)

EOLE, *Inc.*—Rosy primrose

ERECTUM SUPERBUM, *Jap.*—Lilac or violet florets, fine when well grown (Salter)

ERNEST BENARY, *Pom.*—A full well-formed flower, white, tinted with rose, dwarf and free

E. SANDERSON, *L.fl.*—A very fine flower of a bronzy red colour, showy and attractive

ESMERALDA, *Pom.*—Salmon-red and orange (Smith)

ESPÉRANCE, *Jap.*—A fine large flower, with curiously twisted florets of a rosy lilac colour, tipped with white, very distinct and beautiful (Délaux)

ESTELLA, *Pom.*—Rosy yellow. See also Star and Stella

ÉTÉ FLEURI, *J.ear.*—Florets ligulate, erect, or spreading; amaranth-purple, tipped with white, and having a silvery centre (Délaux)

ETHEL, *Jap.*—Pure white, a beautifully formed flower, with broad florets, very fine; one of the best of all the white Japan varieties for late flowering, good strong habit (Major Carey)

ÉTINCELANT, *Jap.*—Reddish crimson, shaded with brown, golden centre (Délaux)

ÉTINCELLE, *Jap.*—(Lacroix)

ÉTOILE, *Pom.*—See Star & Stella

ÉTOILE FLEURI, *Jap.*—Large reddish crimson flowers, each floret margined and tipped with golden yellow (Délaux)

ÉTOILE D'OR, *Jap.*, Star of Gold.—Yellow (Boucharlet)

ÉTOILE DU MIDI, *Jap.*—Very large double flower, centre petals spiral, the outer ones drooping like a parasol, very broad, agate-red, enlivened with orange, first-class variety (Délaux, 1881)

ÉTOILE ORANGEE, *P.ear.*—Bright orange-yellow (Pertuzés)

ÉTOILE FOVEL, *Jap.*—Gold and reddish bronze, large and full (1882)

ÉTOILE POLAIRE, *Inc.*, Polar Star.—Golden yellow

ÉTOILE TOULOUSAINE, *Jap.*—Large and double, florets red, curled and twisted, and when they incurve it forms a golden ball; dark orange in the centre (Délaux, 1882)

EUCHARIS, *Jap.*—Outer florets pure white, centre yellow (Hallock)

EUDOXIE BETEIL.—Snow white (Pertuzés)

EUGÈNE LAUGAULET, *P.an.*—See Eugène Laujaulet

EUGÈNE LAUJAULET, *P.an.*—Splendid yellow hybrid, with orange centre

EUGÉNIE, *Inc.*—Rose and blush, fine

EULALIE LAYE, *Pom.*—Silvery rose

EUTERPE, *Inc.*—Large blush

EVA, *Pom.*—Golden yellow (Smith)

EVE, *Inc.*—Sulphur yellow, delicate flower (Smith)

EVE, *Inc.*—Good blooms, pure white, outer florets tipped with pink (White)

EXCELSIOR, *Ref.*—Bright crimson, double and fine

EXPOSITION DE CHALONS, *Pom.*—Flower ranunculus-like, rose-violet, richly variegated and lined, the florets being tipped with white (Délaux)

EXPOSITION DE TOULOUSE, *Jap.*—(Délaux)

EXQUISITE, *Inc.*—A fine variety, with very full and double blossoms of exquisite form; colour a bright golden yellow, the outer petals shaded orange and reflected salmon (Bull)

FABIAN DE MEDIANA, *J.an.*—Flower large and very beautiful (Lacroix). Synonymous with Fabias de Maderanaz. Disc rosy lilac, ray florets drooping soft pink. See *Journal of Horticulture*, 1884, Nov. 20, p. 463

FABIOLA, *Pom.*—A very dwarf-habited variety, freely producing large corymbs of pretty lilac flowers with fine broad florets

FABIUS, *Inc.*—Orange and salmon

F. A. DAVIS, *Jap.*—Dark rich crimson or maroon, florets long, thick, and thread-like, good and distinct. Syn., J. Délaux

FAIREST OF THE FAIR, *Pom.*—Lilac blush, with silvery tips (Smith)

FAIR MAID OF GUERNSEY, *Jap.*—Long narrow strap-petalled, very fine for cut flowers, pure white, good habit, free flowering, one of the best for late bloom (J. Downton)

FAIR MARGARET, *A.l.*—Delicate rose-pink, distinct colour

FAIR MARGARET, *Pom.s.*—White shaded blush, yellowish at the base, florets curled (Teesdale)

FAIR ROSAMOND, *Inc.*—Rosy fawn (Smith)

FAIRY, *Pom.*—Lemon with dark orange border (Salter)

FAIRY NYMPH, *Pom.*—Pure white

FANFERLUCHE, *Pom.*—Lilac and white, flowers very small, double, and produced in great profusion (Lebois)

FANNY, *Pom.*—Dark rosy red or maroon

FANCHETTE, *P.an.* — Hybrid Anemone, pale lilac, very pretty

FANNY BOUCHARLET, *Jap.*— White, shaded lilac, having twisted florets; fine variety

FASTIGUOSO, *Pom.* — Blush white

FAUST, *Inc.*—Bronze-crimson or purple, very full, fine dwarf habit, quilled, and an early bloomer

FAUSTINE, *Jap.*

FAVOURITE, *Inc.*—Large rose-pink (Clark)

FÉE RAGEUSE, *Jap.* — Large pure white flowers

FÉLICITÉ, *P.ear.* — Orange-yellow; tall, strong grower and a free bloomer

FELICITY, *Ref.*— Creamy white, centre lemon-yellow, dwarf compact habit, large flower (Boucharlet)

FERNAND FERAL, *Jap.*—Florets large, spiral, rose or rose-chamois (Délaux)

FEU D'AMOUR, *Pom.* — Rich dark rosy crimson (Ware, 1884)

FIBERTA, *P.ear.* — Lemon-yellow, flat, and full; a really good free bloomer

FIBRETTO, *Pom.*—Deep orange (Lebois)

FIGARO, *Pom.*—Red and yellow

FIMBRIATUM LUTEUM, *P.* —Olive-yellow, beautifully fringed florets

FINETTE, *A.l.*—A delicate lilac peach, with lighter centre, guard florets broad and well arranged

FINGAL, *Inc.* — Large flower, rose-violet, florets silvery behind, very double and symmetrical, florets wide and finely incurved, a noble show flower

FIORAMESTA, *Pom.* — Blush tinted rose

FIREFLY, *P.an.* — Bright capuchin scarlet with high centre, a very distinct and striking colour (Smith)

FIRMAMENT, *Pom.*—Clear rosy red tipped with gold (Délaux)

FLAME, *Pom.s.* — Single, deep crimson

FLAMME DU PUNCH, *Jap.*— Golden cinnamon, sulphur reverse; sometimes wrongly known as Punch (Délaux)

FLAMBEAU, *Jap.*—Round and very full, florets broad and reflexed like a parasol; of a warm orange-red, shaded with crimson. The habit is vigorous and free. Syn., Flambeaux (Délaux)

FLAVIA, *P.an.*—Anemone, gold, fine

FLEUR DE BOIS, *Jap.*—Bright brick or blood-red, centre golden, flowers in clusters (Délaux)

FLEUR DE MARIE, *L.an.*—Pure white, large and fine for exhibition. As cut flowers for Christmas it is well worth culture. One of the best of its class (Smith)

FLEUR DE MARIE, *Jap.*—Very double, pure white (Délaux)

FLEUR D'ÉTÉ, *J.ear.* — Florets ligulate reflexed, colour rosy violet, tipped with silvery white (Dél.)

FLEUR PARFAIT, *Jap.*—Rosy lilac, very dwarf (Délaux)

FLOCON DE NEIGE, *L.fl.* — (Lacroix)

FLORA, *Ref.* — Lilac, petals recurved

FLORA, *Inc.*—Bright lilac peach, shading off to white; florets broad

FLORA, EARLY, *P.ear.*

FLORENCE, *Pom.*—Dark cherry (Smith)

FLORENCE, *Ref.*—Dark magenta

FLORENCE MARY, *Ref.* — Bright salmon-red; medium size (Pethers)

FLORENCE NIGHTINGALE, *Inc.*—Pale sulphur (Smith)

FOLICHONNE, *Pom.* — White, pencilled with yellow

FORMOSUM, *Jap.*—Large, clear reddish amaranth (De Reydellet)

FORMOSUM ALBUM, *Inc.* — Pale sulphur

FORMOSUM LUTEUM, *L.fl.*— Yellow

FORTUNE'S TWO-COLOURED *Inc.* — Scarlet, chestnut, and orange

FRANÇOIS DÉLAUX, *Jap.* — Crimson, red, or brown, shaded with violet; distinct (Délaux, 1882)

FRANÇOIS I., *Pom.*—Reddish orange, very full and fine for specimens

FRANCONNETTE DUFOUR. —Large rose-violet, with pure white points (Marrouch)

FREDERIC MARRONET, *P.ear.*—Deep golden yellow, reverse orange-red; petals imbricated. A little beauty (Pertuzés)

FREDERIC PELÉ, *P.ear.*— Bright crimson-red, dwarf and good

FREMY, *Jap.*—(Bernard)

FREYCINET, *L.fl.*—Rose washed with yellow, very pretty (De Reydellet)

F. RIGOTAR, *P.an.* — Clear amaranth, with a white centre (Schwartz)

FRIZOU, *Jap.* — Florets twisted and spiral or frilled, canary yellow (Délaux)

FROU-FROU, *Jap.*—Large, red-magenta, centre gold (De Reydellet, 1884)

FULGARE, *Jap.*—See Fulgore

FULGORE, *Jap.*—Flowers large double, twisted, petals amaranth colour; the under part of petals striped with purple, giving it quite a novel appearance; very good for late bloom (Lemoine)

FULTON, *Jap.*—A large and fine flower, with long twisted florets of a clear bright yellow colour, as rich as that of Jardin des Plantes; very good for late bloom when well grown

GAIETY, *Pom.*—Bright red with orange border

GAILLARDIA, *Pom.* — Petals fimbriated, red pointed with yellow (Délaux)

GAILLARDIA, *L.fl.*—Pæony-formed, incurved red-maroon, tipped with gold, yellow reflex (De Reydellet)

GALATEA, *Pom.* — Clear lilac (Smith)

GALATHÉE, *Jap.* — Large flowers, florets twisted, pale rose coloured (De Reydellet)

GANYMEDE, *Jap.*—Florets long, lilac tipped with white (De Reydellet)

GARIBALDI, *L.fl.* — Red chestnut or fiery red, very large (Clark)

GARNET, *J.an.*—Light blood red or garnet, flower heads composed of long curled florets, which form a kind of drooping fringe round an Anemone centre

GARRELOU, *Pom.*—A distinct and attractive flower of a reddish crimson colour, blotched with gold and tipped with rich yellow, the reverse of the florets golden yellow

GAZELLE, *Ref.* — Bright crimson or maroon flower tipped with yellow, an exceedingly attractive variety, of dwarf compact growth, flowers large and of fine form

G. DÉLAUX, *Jap.*—Florets revolute, orange-red (Délaux)

GÉANT, *L.fl.*—(See Giant)

GEM, *Inc.*—Blush

GENERAL BAINBRIGGE, *Inc.* Dark orange-amber and gold centre (Clark)

GENERAL CANROBERT, *P.ear.* — Good, free and early blooming, yellow; very fine for specimens

GENERAL DE LATIGUE, *Jap.* —Bright fiery red or crimson, centre golden. Syn., General Latique (Délaux)

GENERAL HARDINGE, *Inc.*—Indian red and gold shade (Clark)

GENERAL LARTIQUE, *Jap.*—Bright flame colour, reverse of florets golden yellow; good (1882)

GENERAL SLADE, *Inc.*—Indian red, tipped bright orange, very large (Smith)

GEORGE GLENNY, *Inc.*—A sulphur sport from Mrs. Rundle, is of good habit, and makes a fine free specimen plant, carrying upwards of a hundred perfect blooms when well grown; very free and early (Rundle)

GEORGE GORDON, *Jap.*—A bold flower of a rich velvety red shade, brighter than Garnet, said to be a crimson seedling from Elaine (Dixon, 1882), but is the same as l'Africaine. See synonyms

GEORGE HOCK, *A.l.*—Large white

GEORGE PEABODY, *Inc.*—Pearl white, back of florets dark lilac-purple, beautifully incurved and very double, a first-rate show flower. Figured in the *Floral Magazine*

GEORGE STEVENS, *Inc.*—Bright crimson florets, reverse pale gold, very fine (G. Stevens, 1883)

GEORGES SAND, *A.l.*—Red with gold centre

G. WERMIG, *Jap.*—A golden sport from Madame Castex Desgrange. See Golden Madame Desgrange (Wermig, R.H.S., 1884)

GERDA, *Ref.*—A bright orange sport of Julie Lagravère

GERMAINE TOULOUSE, *Jap.*—Unique parti-coloured variety, nankeen shading to white, and shaded with carmine or claret (Délaux)

GIANT, *L.fl.*—Blush white, very large

GLENDOWER, *Inc.*—Rose-carmine, large (Smith)

GLITTER.—Crimson-purple

GLOBE WHITE, *Inc.*—Syn., White Globe

GLOIRE DE FRANCE, *Jap.*—Crimson brown and gold, extra fine (Délaux)

GLOIRE DE MAZARGUE, *Jap.*—Rosy violet, shading to white (Boulanger)

GLOIRE DE MONTROUGE, *Pom.*—Orange and red

GLOIRE DE ST. MARTIN, *Jap.*—A very large flower, with long twisted florets of a beautiful rose colour tipped with pure white, the reverse of the florets carmine (Délaux)

GLOIRE DE TOULOUSE, *Jap.*—Amaranth, crimson, and white; very fine (Délaux)

GLOIRE DE TOULOUSE, *Inc.*—Snow white, imbricated, large perfect form, fine white (Salter)

GLOIRE D'OR, *Ref.*—Jonquil yellow (Délaux)

GLOIRE LYONNAISE, *L.fl.*—(Boucharlet)

GLOIRE RAYONNANTE, *Jap.*—Quilled florets, satin rose coloured, shaded lilac, large and early. Sometimes known as Hedgehog (Bernard)

GLORIA MUNDI, *Inc.*—Brilliant golden yellow, beautifully incurved, very high in the centre, fine dwarf habit, and very free

GLORIA SOLIS, *Jap.*—Bright golden yellow, outer florets rich orange

GLORIOSUM, *Jap.*—Flower heads of large size, composed of very long slender florets of a bright orange colour, curiously twisted and curled

GLORY, *Inc.*—Rosy lilac. Syn., Sarnia Glory

GLUCK, *A.l.*—Golden orange or yellow, large and fine, one of the best in its class for exhibition when well grown

GOKIO, *Jap.*—Tender mauve inclining to white (Délaux)

GOLD BUTTON, *P.ear.*—See Golden Button, also Bouton d'Or

GOLDEN AURORE, *Pom.*—Golden yellow (Hay)

GOLDEN AURORE, *Pom.*—Bright golden sport of Aurore Boréale (Hayes)

GOLDEN AUTUMN, *Pom.*—Yellow, free and compact habit

GOLDEN BALL, *Inc.*—Bright orange, with golden back and tips, beautiful (Smith)

GOLDEN BEVERLEY, *Inc.*—Golden canary colour, a beautiful show flower

GOLDEN BUTTON, *P.ear.*—Early blooming yellow

GOLDEN CEDO NULLI, *P.an.*—Golden canary, good and free

GOLDEN CHRISTINE, *Ref.*—Golden buff, large and fine; makes a good specimen (Merry)

GOLDEN CIRCLE, *Pom.*—Bright golden orange, of dwarf habit, and fine for specimen plants (Salter)

GOLDEN CLUSTER, *Pom.*—Gold

GOLDEN DRAGON, *Jap.*—Curiously quilled gaping florets

GOLDEN DR. BROCK, *Inc.*—Bright golden yellow (Salter)

GOLDEN DROP, *P.an.*—Gold (Salter)

GOLDEN EAGLE, *Inc.*—Indian red and orange. Same as Orange Perfection. See also Aigle d'Or, *Pom.* (Davis)

GOLDEN EMPRESS OF INDIA, *Inc.*—A very fine incurved flower of a beautiful golden yellow colour

GOLDEN FLEECE, *Inc.*—Light canary yellow

GOLDEN GEORGE GLENNY, *Inc.*—See Mrs. Dixon

GOLDEN HERMINE, *Inc.*—Bright golden orange (Smith)

GOLDEN JOHN SALTER, *Inc.*—Golden yellow changing to amber, a very fine flower (Salter)

GOLDEN LOTUS, *Inc.*—Bright golden orange

GOLDEN MADAME DESGRANGE, *J.ear.*—This is a yellow sport of Mdme. C. Desgrange which received a first-class certificate R.H.S., 1884

GOLDEN MDME. DOMAGE *P.ear.*—Dwarf and free habit, sulphur yellow. Syn., Golden Jardin des Plantes, *P.ear.* (Henderson)

GOLDEN MDME. MARTHE, *Pom.* Syn., Miss Oubridge.—One of the best of golden Pompons

GOLDEN QUEEN OF ENGLAND, *Inc.*—Golden canary, very large and fine (Smith)

GOLDEN TREVENNA, *Pom.*—Yellow, free and good

GOLDEN TRILBY, *Inc.*—Clear yellow, a finely incurved flower

GOLDFINDER, *Pom.*—Golden yellow (Smith)

GOLD THREAD, *Jap.*—Bronze yellow or orange, with narrow twisted florets

GOLIAH, *Inc.*—Large white, incurved

GRACE DARLING, *P.an.*—Fine lilac with blush centre

GRACIEUSE, *Pom.*—Rosy white, the florets near the centre rose coloured, centre golden (Délaux)

GRANDIFLORUM, *Jap.*—A fine large tasselled flower of a golden yellow colour (Salter)

GRANDIFLORUM SUPERBUM, *Jap.*—Hybrid raised by Délaux et fils

GRANDPAPA, *Inc.*—Large red and orange

GRAND LODGE RIVAL, *Inc.*—Orange-salmon, distinct in colour, and good flower when well grown (Pethers)

GRAND SULTAN, *Jap.* — Carmine, long quilled florets

GRAND SULTAN, *Inc.*—Amber, very large (Clark)

GRAND TURK, *Jap.*—Rose-purple (Bonamy)

GRAND TURK, *Jap.*—(Veitch)

GRAZIELLLA, *Pom.* — Blush lilac

GRENADIÈRE, *L.fl.* — (Bouch.)

GUERNSEY NUGGET, *Inc.* — Yellow, fine large blooms (Salter)

GUILLAUME DÉLAUX, *Jap.* —A monstrous flower, with split or forked petals of the corkscrew form, orange-scarlet, and incurved centre petals of a golden colour; a new type (Délaux)

GUILLERI, *P.an.*—Anemone disc, golden yellow ray, straw colour (Lebois)

GUS. HARRIS, *Pom.s.*—Single, rosy lilac disc, yellow (Teesdale)

HACKNEY HOLMES, *Inc.*—Although the colour of this kind is in no way new, yet the lower half of the petals are of that very rich, high-coloured chestnut-red, and the remaining half of a bright yellow, which renders it most desirable, and will sure to become a favourite. The main feature of this variety (and which is so highly valued in cut blooms for competition) is its long bold petals and the length and depth of gold centre, which stands up higher and more noble than many other varieties (Maj. Carey, sent out by Cannell)

HANDEL, *A.l.fl.* — Dark rose (Smith)

HANUM, *P.ear.*—Early and good

HARDY, *Jap.* — Reddish brown and yellow (Délaux)

HARLEQUIN, *Jap.* — See also Arlequin; colour creamy white, striped and shaded with rose (Veitch)

HAROLD, *Inc.*—Bright chestnut (Clark)

HARRIET THORPE. — Single, blush changing to white, beautiful late variety (John Thorpe)

HEBDEN BRIDGE, *P.ear.* — Bright yellow. Syns., Aigle d'Or and Berrel

HEBE, *Jap.* — Rose-lilac, tipped with white (De Reydellet)

HECLA, *Pom.* — Amaranth-rose, full and of free habit (Bull)

HECUBA, *Inc.*—Dark orange

HEDGEHOG, *Jap.* — See Gloire Rayonnante

HÉLÈNE, *Pom.* — Rosy violet. Sometimes called Helena

HÉLÈNE, *Jap.* — Pure white, raised by Boucharlet

HELEN LINDSAY, *Pom.*— Cream-white (Smith)

HÉLOISE, *L.fl.*—(Boucharlet)

HÉLOISE MIELLEZ, *P.ear.*— Paper white, good shape

HELVÉTIE, *Jap.* — Amaranth-carmine, with a silvery centre (Délaux)

HENDERSONII, *P.ear.*—Yellow

HENRI DESFOSSES, *Pom.* — Orange-carmine striped with yellow, imbricated

HENRIETTA, *Inc.*—Golden fawn

HENRIETTA HIMMES, *P.ear.* —White, passing into yellow (Lebois)

HENRIETTA, *Pom.*—White and carmine, fine

HENRI SESQUIÈRES, *P.ear.*— Flower rather large, imbricated, violet-rose, of dwarf habit (Pertuzés)

HENRY IRVING, *P.s.* — Single, soft, silvery rose, disc clear yellow (Teesdale)

HENRY MONNIER, *Pom.*— Lilac (Lemoine)

HERCULES, *Inc.* — Very large red-carmine; this when well grown is the largest variety known (Davis)

HEREWARD, *Inc.* — Purple, silvery back

HER MAJESTY, *Inc.* — Silvery blush (Smith)
HERMINE, *Inc.* — Blush, tipped purple, incurved
HERMIONE, *Inc.*—See Herminc
HERMINE, GOLDEN, *Inc.* — Yellow. See Golden Hermine
HERO OF MAGDALA, *Jap.*— Blood red, marked with orange (Salter)
HERO OF STOKE NEWINGTON, *Inc.*—Rosy blush shaded with purple, good show bloom
HETTY BARKER, *Inc.*—Good white, tinged with lilac florets, quilled slightly
HIVER FLEUR, *Jap.*—Very large double flowers, cream colour tinted with rosy violet; the edges of the florets and centre of the flower buff yellow; novel and distinct (Délaux)
H. JACOTOT, *Pom.*—Small flowers, violet-carmine, or fiery violet, tipped with white, distinct (Délaux)
HIPPOLYTE JAMAIN, *P.ear.* —Rosy carmine, reverse yellow, a globular flower with imbricated petals (Pertuzés)
HOFGÆRTNER LEBL., *Jap.*— (Pynnert)
HOLMAN HUNT, *Inc.* — Rose-pink, large (Smith)
HORTENSIA ROBINET, *Jap.*— Fiery crimson (Délaux)
H. S. RUNDLE.—Sulphur-white, pure white in greenhouse (Salter)
IAGO, *Inc.* — Dark purple-violet. See Yago, Salter (Pethers)
IDA, *Pom.*—Sulphur-yellow, flowers very large and double (Lebois)
ILE JAPONNAISE, *Jap.*—Pale lilac-purple, shaded pink, with light golden centre (Dél., 1882)
ILLUSTRATION, *Jap.* — Large flower, colour brick-red, flamed and shaded golden yellow, petals twisted and drooping, very distinct (Délaux)
ILLUSTRATION, *P.ear.*—White, shaded blush, early flowering. Syns., Lucinda, Little Pet, Snowflake, Sportsman
IMBRICATUM, *Pom.* — (Boucharlet)
IMOGENE, *Inc.*—Rose with silvery shade (Salter)
INCARNATUM, *L.fl.*—Rose shading to white and of good form (De Reydellet)
INCOGNITA, *Inc.*—Good bold exhibition flower, rich pink
INDIAN RED, *Ref.*—Good and showy
INEZ, *Pom.*—Pure white, imbricated
INIMITABLE, *P.ear.*—Good free habit and distinct, bright orange-yellow
INNER TEMPLE, *Inc.*—An improved Refulgence, sometimes known as Aregena (Dale)
INO, *Inc.*—Rosy blush
INSIGNE OR ENSIGN, *Inc.*— Lilac and purple
INVINCIBLE, *L.fl.*—Large tasselled white
IOLANTHE, *Pom.s.*—Single ray florets, bright crimson in a double row, centre yellow
ION, *Inc.* — Pure white, large (Smith)
IONA, *Inc.*—Bright citron yellow, beautifully incurved, high centre and a model of form
IPHIGENE, *Pom.* — Lilac-rose, the form of a ranunculus, superb
IRIS, *Pom.*—Beautiful lilac-rose, tipped with pink (Salter)
IRIS, *Jap.*—Deep lilac flamed with violet (Délaux)
ISABELLA BOTT, *Inc.* — Pearl white, one of the finest for exhibition blooms when well grown
ISAURE, *L.fl.*—Large cream and rose, very free
ISIDORE FERAL, *Jap.*—Tender rose-lilac, centre gold (Délaux, 1882)

JACQUES HIMMES, *L.fl.*—Deep Nasturtium red, centre golden yellow (Lebois)

JAMES FORSYTH, *Pom.*—Large flower, crimson and orange

JAMES SALTER, *Jap.*—Good and early, blooming with Elaine and Mrs. G. Rundle, rose-lilac, curled florets, fine for decorative uses (Salter)

JAMES Y. MURKLAND.—Single, pure snowy white (Thorpe)

JANE, *Inc.*—Silvery pink (Smith)

JANE AMELIA, *Pom.*—Rose-carmine (Smith)

JANE SALTER, *Jap.*—White, bordered and striped with rosy lilac, large flower-heads, composed of long broad curled florets, early and very free flowering. Illustrated in the *Floral Magazine*

JAPANESE VIOLET, *Jap.*—Lilac, a rather late variety, full large blooms, curled and twisted, peculiarly sweet scented with the smell of Violets (Carey)

JAPONAIS, *Jap.*—Broad petals of a brilliant deep yellow, distinctly spotted with rusty brown, an enormous flower (Délaux)

JAPON FLEURI, *Jap.*—Black velvety maroon with crimson and gold centre. 1st class, Hackney, 1882 (Délaux)

JAPONICUM, *Jap.*—Claret, striped yellow

JAQUARITE, *Pom.*—Golden orange, ranunculiform, fine

JARDIN DES PLANTES, *Inc.*—Finest of all yellows, rich pure gold tint, giving immense Dahlia-like blooms under good culture

JARDIN DES PLANTES, *Inc.*—Fine bronze

JARDIN DES PLANTES, *P.ear.*—Milky white, reflected with lilac (Pelé)

JARDIN D'HIVER, *A.l.fl.*—Dark rose (Clark)

JASON.—Amaranth (Bull)

JEANNE D'ARC, *Inc.*—White tipped lilac, an enlarged Aimée Ferrière (Lacroix, 1883). Syn., Madame Madeleine Tezier

JEANNE D'ARC, *Pom.*—Blush

J. DÉLAUX, *Jap.*—Large and double, dark brown-crimson, brilliantly flamed, extra full and good. Syn., F. A. Davis (Délaux, 1882)

JEAN DÉLAUX, *Jap.*—Brick red, colour rich and distinct (Délaux)

JEANNE DÉLAUX, *Jap.*—Large, full, and double, of a dark crimson-brown colour, brilliantly flamed, centre golden (Délaux)

JEAN HATCHETTE, *P.ear.*—White hybrid Anemone

JENNY LIND, *Inc.*—Rosy sulphur (Smith)

JERSEY BEAUTY, *Pom.*—Beauté de Jersey

JESSIE, *Pom.*—Orange-amber (Smith)

JEWESS, *Ref.*—Orange and red, large (Clark)

J. HILLIER, *Jap.*—Rich amaranth, spotted with violet, having long curled florets which droop gracefully, good (1882)

J. HILLIER, *Jap.*—Amaranth, marked with violet, curious and distinct (1883)

JOHN BUNYAN, *Inc.*—Bright rose (Smith)

JOHN RAE, *Jap.s.*—Disc golden, ray of reddish bronze, actinoid florets (College Garden, Dublin, 1882)

JOHN SALTER, *Inc.*—Canary yellow. Like Mr. Howe (Salter)

JOHN SALTER, *Inc.*—Reddish crimson shading off to orange in the centre, a fine flower

JOHN SALTER, GOLDEN, *Inc.* Deep amber-yellow, good flower. See Golden John Salter

JOHN THORPE.—Deep gold and brown, with large outer florets; new American seedling (Thorpe)

JOHN W. CHAMBERS.—Single pure golden yellow, flowering rather late

JONAS, *Pom.*

JONATHAN, *Jap.*—Beautiful variety of a rosy violet colour flamed with white, having a nankeen centre (Délaux)

JONQUILLE, *Pom.* — Flowers very double, and very bright golden yellow; this is a decided acquisition to this pretty class of Chrysanthemum (Lemoine)

JOSEPH DURBAN, *Jap.*—Very large flower, of a reddish brown colour (D. A.)

JOSEPH MAHOOD, *Jap.*—Orange and cinnamon, large and good (Mahood, 1883)

JOSEPHINE LATOUCHE, *Pom.*—Pure white, imbricated

JOSIAH WEDGEWOOD, *Inc.*—Rose-carmine

J. SCHWARTZ, *Pom.*—Fiery red, distinct (Schwartz)

JUDI, *Pom.*—Canary yellow. See Judy (Salter)

JUDY, *Pom.*—Bright soft yellow (Salter)

JULIA ENGELBACH, *Pom.*—Yellow with brown points (Smith)

JULIA GRISI, *Ref.*—Light rose-pink, new colour, with odour of Violets (Smith)

JULIE LAGRAVÈRE, *R.pfl.*—Small dark velvety maroon or reddish brown, approaching crimson, good in colour, being superior to Old Bob

JULIET, *L.fl.*—(Salter)

JULIUS SCHARFF.—Rich violet-amaranth, large and fine; new American seedling (Thorpe)

JUNO, *A.l.fl.*—Large white

JUNO, *Jap.*—Golden yellow (Salter)

JUPITER, *Jap.*—Flower contorted, brilliant fiery red, shaded with vivid crimson, central florets spiral, extra (Délaux)

JUSTINE TESSIER, *Pom.* — Sulphur white

JUSTIN TESSIER, *Pom.s.* — Tender lilac (Lebois)

JUVENA, *Jap.*—A very dark thread-like Japanese, very striking

KÆMPFER, *Jap.* — Bronzy red and yellow, large and good (Veitch, 1882)

KATHERINE TALFOURD, *Inc.* —Amber and red

KING, *Inc.*—Light peach

KING OF ANEMONES, *A.fl.*—Large and distinct crimson-purple flower (Smith)

KING OF DENMARK, *Inc.*—Bright rose-lilac (Smith)

KING OF THE CRIMSONS, *Ref.*—Certificated in 1882. Of a rich velvety crimson colour (Davis)

KIRAKANA, *Jap.* — Orange and saffron-yellow mixed, striped and lined with yellow, reverse brown (Délaux)

KIRAKANA, *Jap.* — Very large blooms of a rosy orange washed with violet, slightly tipped with yellow (Délaux)

KLEBER, *Pom.*—Red, dwarf, and distinct (Lemoine)

LA BELLE BLONDE, *Inc.* — Blush white, large (Smith)

LA BIEN AIMÉE, *Jap.*—White, tinted lilac, frizzed, reverse of petals rosy violet, nankeen yellow centre (Délaux)

LA CARMELITE, *Pom.*—Dwarf and pretty

LA CHARMEUSE, *Jap.*—Rich, bright amaranth, extra (Délaux)

LA CANDEUR, *L.fl.*—Large globular flower with broad petals, pure white. One of the best whites in this section yet obtained

LA CHINOISE, *Jap.* — Orange and brown (Boulanger)

LA CHINOISE, *Jap.*—See Chinaman

LACINIATUM, *Jap.* — Fringed white, resembling a Japanese Pink

LACINIATUM SUPERBUM, *Pom.*—Rosy violet, tipped with gold (Délaux)

L'ADMIRABLE, *Pom.*—(Dél.)

LADY BLANCHE, *Inc.*—Cream white, early (Smith)

LADY CAREY, *Inc.*— Large rose-lilac, with silvery back (Davis)

LADY DOROTHY NEVILLE, *Pom.*—Bright yellow (Smith)

LADY GODIVA, *L.fl.*—Sulphur white (Salter)

LADY HARDINGE, *Inc.*—Delicate rose-pink tipped blush, large (Clark)

LADY MARGARET, *A.l.*—Large white, with double row of guard florets (Salter) *(frontispiece)*

LADY PALMERSTON, *Inc.*—Primrose-yellow

LADY RUSSELL, *Inc.* — Blush lilac or white with lilac points (Smith)

LADY SELBORNE, *Inc.* — Pure white sport from James Salter (Salter, 1881)

LADY SLADE, *Inc.* — Delicate lilac pink and blush centre (Smith)

LADY ST. CLAIR, *Inc.*—Like White Queen or Empress of India (Downie, Laird, and Laing)

LADY TALFOURD, *Inc.*—Delicate rose-lilac with silvery back, florets beautifully incurved and of a shell-like form, very double and of medium size (Salter)

LA FAVORITE, *Jap.* — Violet (Délaux)

LA FIANCÉE, *Jap.* — Flowers very large, very double, beautifully imbricated, white, slightly spotted with rose colour, and beautifully fimbriated (Délaux)

LA FIANCÉE, *Pom.* — White slightly tinged with rose (Lem.)

LA FOURNAISE, *Jap.*—(Lacx.)

LA FRANCE, *Pom.* — Good fringed white

LA FRANCE, *Jap.* — Crimson bronze lit up with flame colour (1882)

LA FRAICHEUR, *Jap.*—Flowers lilac with white reflex (Délaux et Boucharlet)

L'AFRICAINE. — Dark maroon-red, sometimes known as George Gordon (Délaux)

LA FRISURE, *Jap.*—A fine large full flower with peculiarly twisted and curled florets of a soft rose colour marked with white, the underside of the florets being of a silvery shade (Délaux)

LA GÉANTE DE VALENCE, *Jap.*—Florets tubular or quilled, rosy lilac (De Reydellet)

LAIS, *Ea.fl.* — Anemone, purple and gold

LA JAPONNAISE, *Jap.*—See Ile Japonnaise

LAKME, *Jap.*—Salmon, rose, and yellow (Délaux)

LALLA ROOKH, *Inc.* — Dark ruby rose (Pethers)

L'ALSACE, *Jap.*—Colour violet tipped with white (De Reydellet)

L'AMI BOUCHARLET AINÉ, *Jap.*—Violet or amaranth-purple (Délaux et de Reydellet)

L'AMIE DU CŒUR, *Jap.*—A variety with very small flowers of beautiful form and very double, with long curled and twisted florets of a beautiful rose colour, tipped with white and silver on their reverse side; the centre of the flower yellow; exceedingly pretty

LA MASCOTTE, *Pom.* — First class flowers, imbricated and distinct (Lemoine)

LA NEIGE, *Pom.*—Snowy white, full. Syn., Boule de Neige (Boucharlet)

LA NUIT, *Jap.*—Fine rose colour, yellow behind, distinct and curious (Lacroix)

LA NYMPHE, *P.ear.*

LA NYMPHE, *Jap.* — A very pretty flower of a delicate peach colour shaded with white

LA PETITE BRUNETTE, *Pom.*—Fawn (Salter)

LA PETITE MARIE (Little Mary), *P.ear.*—Very dwarf and compact, and most floriferous, forming a dense mass of white button-like flowers a foot in height (Ware, 1882)

LA PURETÉ, *Jap.*—White, finely fringed, and good late bloomer (Boucharlet)

LARA, *Pom.* — Cream, tipped cherry

L'ARDOISÉE, *L.fl.*—(Lacroix)

L'ARDUGÈRE, *Pom.*—Apricot-yellow (Boucharlet)

LA ROUGE, *Jap.*—(Délaux)

LA ROUSSE, *Pom.* — Orange-red

LA SULTANA, *Pom.* — Bright lilac

LATE DUCHESS, *Jap.* — Very late, but a shy bloomer

LATE FLORA, *P.ear.* — Golden flowers in clusters, fine for cutting (Ware, 1884). Syn., Early Late Flora of Piercy

LATONA, *L.fl.* — White, washed with sulphur yellow (Smith)

LA TRAVIATA, *Jap.* — Very large, carmine-violet or amaranth, dotted with white in the centre (Délaux)

L'AUBE MATINAL, *Jap.* — Salmon-red (Délaux)

LAURENCE, *Jap.*—Large flowers, very double, ground colour delicate rose, strongly lit up with white, speckled with violet-rose, golden centre

LAURINDA.—Fine rose-purple

LAVALLÉE, *P.ear.*—Good white (1883)

LA VIERGE, *P.ear.*—White, with sulphur centre (Boucharlet)

LA VOGUE, *P.ear.*—Bright gold or yellow

LE BOURREAU, *L.fl.* — Red, tipped gold, very double

LEDA, *L.fl.*—Large white, late flowering variety

LE DÉSIRÉ, *Pom.* — Early double, of a lively rose colour (Délaux)

LE GRAND, *Inc.*—Extra large, florets broad and stout, elegantly incurved, colour delicate rosy peach, shading to fawn, the florets next the centre faintly striped

LE JONGLEUR, *Pom.*

LE LUXEMBOURG (Pelé)

L'ÉMIR, *Inc.* — Light reddish crimson, incurved, fine show bloom

LEMOINE, *Pom.*

LE NAIN BÉBÉ, *Pom.*—Rosy lilac, with the odour of violets

LENARD, *Pom.*—Yellow tipped with purple, novel and good

LE NÈGRE, *Jap.*—Black, tipped red, lovely in colour, often showing a bright green centre, incurved. See also Clark's Negro Boy

LEONIDAS, *Inc.*—Flowers very large, finely imbricated, colour a beautiful sulphur yellow; a decided acquisition to these useful autumn-flowering plants; an extremely fine exhibition variety (Lemoine)

LÉON LEGUAY, *Inc.*—Lilac.

LEONORA, *Pom.*—Orange, bordered with red, fine and early flowering (Bull)

LEOPARD, *Jap.*—White, slightly rosy (Salter)

LE PARNASSE, *Pom.*—Rose and yellow, shaded lilac or violet

LE PROPHÈTE, *Inc.*—Golden fawn, large-flowered (Salter)

L'ESCARBOULE, *Pom.* — Very fine yellow

LES GOBELINS, *L.*—Rosy lilac, centre white (Pelé)

LILAC CEDO NULLI, *Pom.*—Rose-lilac, fine for specimen

LILACINUM ROSEUM, *Jap.*—Rosy lilac, with broad florets; a very fine large flower (Délaux)

LILAC GEM, *Pom.*—Rosy lilac

LILAC PRINCESS, *Inc.*—Rosy lilac, good flower

LILAS, *Pom.*—Lilac-rose, dwarf and free (Délaux)

L'ILE DES PLAISIRS, *Jap.*—Red, striped yellow and tipped with gold, extra (Délaux)

LILIPUTIAN, *Pom.*—Good white full flower

LILY PITHON, *Pom.* — Deep amaranth (Lebois)

L'INCOMPARABLE.— (Délaux)

L'INCOMPARABLE, *Jap.*—(Délaux)

L'INCOMPARABLE, *Jap.*—Petals of spiral form, yellow, flamed with reddish brown, base of centre petals a showy crimson, distinct (Délaux)

L'INCONNU, *Jap.*—Buff colour, reverse yellow (Délaux)

LINGOT D'OR, *Pom.*—Gold

LITTLE BOB, *P.ear.*—Maroon-red. See also Dr. Bois Duval and Scarlet Gem

LITTLE HARRY, *Inc.*—Bright golden amber, very double, of medium size (Smith)

LITTLE MARY, *Pom.*—See La Petite Marie

LITTLE PET, *Pom.*—Incurved, blush Pompon (Smith)

LITTLE ROSETTA, *Inc.*—Amber (Smith)

LIZZIE HOLMES, *Pom.*—Canary yellow, with rosy tint (Smith)

LORD ALCESTER, *Inc.*—Primrose-yellow, of fine form. See Princesse Impériale

LORD BEACONSFIELD, *Jap.*—Reddish, shaded cerise (Veitch, 1882)

LORD CLYDE, *Ref.* — Bright glowing crimson (Smith)

LORD ELGIN, *Inc.*—Rose, large (Clark)

LORD DERBY, *Inc.*—Very dark purple, florets broad and finely incurved, flower-heads globular or cone-shaped; a most splendid variety either for cut blooms or specimens (Clark)

L'OR DE FRANCE, *Jap.*—Red or flame coloured, reverse violet (Délaux)

LORD OF THE ISLES, *Inc.*—Rosy orange (Clark)

LORD PALMERSTON, *Inc.*—Rose-amaranth, tipped silvery blush (Smith)

LORD RAGLAN, *Inc.* — Dark purple

LORD RANELAGH, *Inc.* — Light red-orange (Salter)

LORD STANLEY, *Inc.*—Large orange-amber

L'OR DU RHIN, *Jap.*—Pure gold, thick and free (Délaux, 1883)

LORD WOLSELEY, *Inc.* — A bronze-coloured sport from Prince Alfred, fine back row bloom (Orchard, 1st class R.H.S., 1882)

L'ORIENT. *L.fl.* — Large double red, very fine (Lemoine)

LOTHAIRE, *L.fl.*—Yellow

LOTHARIO, *Inc.* — Light ruby red, fine incurved

LOUIS BARTHÈRE, *Inc.*—Red-crimson (Bonamy)

LOUIS BONAMY, *A.l.fl.*—Large lilac

LOUIS TESSIER, *Pom.* — Purplish lilac (Lebois)

LOUISE, *Pom.*—Syn., Louise de Jersey

LOUISE BARTHÈRE, *Jap.*—(Délaux)

LOUISE PITON, *Pom.*—Silvery blush

LOUISE SCHWARTZ, *Pom.*—Small milk-white flowers, shaded with lilac-purple (Schwartz)

LUCIDUM, *Inc.*—Very early white. Syn., Diadem

LUCINDA, *P.ear.*—Rosy lilac or blush (Salter)

LUCIFER, *Jap.*—A very large flower, petals tubular one half their length, limb vermilion-red, reverse and also tube nankeen-yellow, very curious and distinct (Salter and Veitch, 1882)

LUCIUS, *Inc.*—See Lusias

LUCRÈCE, *Pom.*—Orange and brown, tipped with gold

LUNA, *Inc.*—Golden yellow, with small brown tips; a fine show flower

L'UNIQUE, *Pom.*—Lilac, strongly striped with white, reverse white (Délaux)

LUTEUM, *Pom.s.*—Single yellow

LUTEUM FORMOSUM, *Inc.*—Golden yellow. Syn., Delight

LUTEUM STRIATUM, *Jap.*—Good and showy

LUTHER, *Inc.*—Large rosy crimson (Smith)

LUXEMBURG, *P.ear.*—Salmon-orange, or bronze-yellow. Syn., Mrs. Wood (Pelé)

LYON, *P.ear.*—Rose-purple, good

LYSIAS, *Inc.* — Red-orange (Smith)

MABEL, *P.an.*—Rose

MABEL WARD, *Inc.*—A golden yellow sport from White Eve. First exhibited in 1881 by Mr. Martin. Sent out by Cannell, 1882. Syn., Bendigo

MACARY, *Jap.*—White, tinted a warm rose colour, very large and broad petals. See Dr. Macary

MACMAHON, *Jap.* — An enormous flower with large broad florets; colour a beautiful rosy lilac, with white back; a very fine, free flowering, dwarf-growing variety

MADAME ALBERT PUYMIROL, *Inc.* — Rosy orange and gold back

MADAME ALPHONSE DUFOY, *P.ear.*—White (Pelé)

MDME. ANDRY, *L.fl.*—Cream, edged with carmine, flowers of medium size and very double (Lebois)

MADAME BACHOUX, *P.ear.*—Lilac-rose, yellow centre

MADAME BERTHA PIGMY, *J.an.*—Guard or ray florets rose-magenta, disc similar in tint. A good, full flower

MADAME BERTIER, *Jap.*—(Délaux)

MADAME BERTIER RENDATLER, *Jap.*—Large flowers, very double and of fine form; nankeen shaded with rose; quite a novel colour; a free blooming and attractive variety (Bertier)

MADAME BOUCHARLET, *Inc.*—Incurved white (Délaux)

MADAME BOUCHARLET, *Jap.*—Canary-yellow, fine (Lacroix)

MDME. BOUCHARLET AINÉ, *Jap.*—A magnificent flower with long quilled florets of a beautiful canary-yellow colour; it is one of the finest varieties of this colour

MADAME BOUCHARLET, *Jap.*—Yellow (De Reydellet)

MADAME BOUCHARLET, *Jap.*—Florets laciniate, curled, lilac and white (Marrouch)

MADAME BRUN, *Jap.*—Quilled pink, with flat-pointed petals, soft and pretty (1st class, R.H.S., 1882, Lacroix)

MADAME CABROL, *J.an.* — Large blush, florets variously quilled, fine for cut flowers (1884, Ware)

MADAME CAMERSON, *L.fl.*—Crimson, tipped with gold

MDME. CARNAC, *Pom.*—Lilac, with yellow centre

MADAME C. AUDIGUIER.—Mauve-pink, large and fine blooms

MADAME CHALONGE, *P.an.*—Blush, and yellow centre

MADAME CHARLES LEBOIS, *L.fl.*—A very beautiful yellow, with white margin (Lebois)

MADAME CHATÉ, *L.fl.*—White and lilac, centre cream (Pertuzés)

MADAME CHATÉ, *Inc.*—Broad petals, white, lined violet, cream-coloured centre

MADAME CASTEX DESGRANGE, *Jap.*—Flowers open sulphur and change to pure white. Good for open-air culture and for cut flowers, or for pot culture, being dwarf, early, and of good habit (Ware, 1882)

A soft yellow sport of this variety appeared in several collections in 1884.

MDME. CHAUVIÈRE.—Large, incurved, blush (Smith)

MDME. CHINARD, *Jap.*—Flowers enormous, petals being long towards the exterior, and diminishing at the centre of flowers, of a fine bright rose, with a silvery white reflection, sometimes striped with deep rose; a most distinct and beautiful variety (Ch.)

MADAME CLÉMENCE AUDIGUIER, *Jap.* — Tender rose, centre petals spiral or twisted, centre white

MADAME CLOS, *J.a.*—Ray florets strap-shaped, rose-violet; disc full and white shaded with lilac and tipped with yellow; very good habit

MADAME CORBAY, *L.fl.*

MADAME D'ARNAUD, *Pom.*—Pale purple, bright and pretty (Délaux)

MADAME DE FLEURY, *L.fl.*

MDME. DE MERBEIEUX, *L.fl.*

MADAME DE MERBEIEUX, *Pom.*—Gold

MADAME DE MONTAL, *Pom.* —Anemone, disc golden yellow, ray blush. Syn., Mdme. Montels (Bonamy)

MADAME DE SEVIN, *Jap.*—Florets *en spirale*, rose or lilac-amaranth, centre white (Délaux)

MADAME DEVEILLE, *Jap.*—Florets creamy white, striped rosy violet (Ware, 1884)

MADAME DE SOULANGIS, *Pom.*—Amaranth (Lebois)

MADAME DE VATRY, *Pom.*—Rose-lilac

MADAME DE WILDEMAN, *Pom.*

MADAME DOMAGE, *Pom.*—Silver blush, changing to white, very double

MADAME DOMAGE, *L.* —Flowers snowy white, large and double (Lebois)

MADAME DUFOY, *P.ear.* —White, lemon centre. Syn., Jardin des Plantes

MADAME ÉMILE DUFOUR, *Jap.*—Long twisted florets, bloom rose-pink, centre orange (Marrouch)

MADAME EUGÈNE DOMAGE *Pom.*—Pure white

MADAME FÉRAL, *L.*—Shining rose colour, centre white

MADAME FERRAND, *P.s.*—Tender lilac, almost white (Ferrand)

MADAME FOULD, *Pom.* —Cream

MADAME FRANCONETTE DUFOUR, *Jap.*—(Marrouch)

MADAME GODERAU, *A.l.*—Sulphur

MADAME GRAEME, *L.*—Large white

MADAME GRANIE, *P.a.* —Anemone, disc canary-yellow, ray pure white, fine (Bonamy)

MADAME GUENIN, *P.a.* —Anemone, disc and ray cinnamon (Bonamy)

MADAME GUILLAUME, *R.*—Syn., Christine and Ne Plus Ultra, which see

MADAME LEBOIS, *Inc.*—Delicate pink and yellow

MADAME LABORDE, *L.*

MADAME LEMAIRE, *P.ear.*—White, changing to rose

MADAME LEO, *L.*—Ivory white, very double

MADAME LEMOINE, *Jap.*—Salmon and rose, good and distinct flower

MADAME MADELEINE TEZIER, *Inc.* — White. Syn., Jeanne d'Arc

MADAME MARTHA, *Pom.* — Pure white, very fine

MADAME MARTHA.—Golden. See Golden Madame Martha

MADAME MARTHE. — See Madame Martha

MADAME MAZÈRES, *Pom.*—Beautiful silvery lavender

MADAME MONTELS, *P.an.*—Hybrid white with yellow centre, very distinct and beautiful

MADAME PAGES, *L.*—White, shaded with orange-red (Marrouch)

MADAME PAULINE DESCHAMPS, *Pom.* — White and carmine

MADAME PECOUL, *P.ear.*—Dark violet-rose. Syn., Madame Piccol and Madame Pecoval, Mr. Piercy, &c. (Pelé)

MADAME PEPIN, *Pom.*—Red and orange

MADAME PICHAUD, *Pom.* — White and crimson

MADAME POGGI, *Inc.*—Chestnut crimson (Smith)

MADAME RIVAL VERNE, *Pom.*— Broad white florets reflexed, the central florets yellowish; distinct and free

MADAME ROUSSILON, *Pom.* —White, tipped rose

MADAME ROUX, *Jap.* — Has been called a Japanese Pompon: florets lilac above, white below, fringed, and arranged into a full, compact bloom (Lacroix)

MADAME ROUX, *Jap.*—Florets red-amaranth, reverse white, laciniate florets (Lacroix)

MADAME TEZIER, *Inc.* — Enormous globular double white flowers, extra

M. R. LARIOS, *Jap.*—Good and showy

MADAME SENTIR, *P.an.* — Pure white

MADAME THÉRÈSE CLOS, *Jap.* — Similar in colour to Madame Clos, but not so good

MADAME VICTOR VERDIER, *Pom.*—Rose and blush

MADELAINE DAVIS, *P.ear.*—Good and early yellow (Davis)

MADONNA, *L.fl.* — Large, pink tasselled (Clark)

MAGENTA KING, *Pom.s.* — Long ray florets, intense magenta, centre or disc orange (Teesdale)

MAGNUM BONUM, *Jap.*—Rosy lilac with lighter back; the flower-heads, which are very large, are composed of broad, flat, fringed florets

MAID OF SARAGOSSA, *Pom.* —Rose and blush (Smith)

MAIZE, *Ref.*—White, shaded straw colour, early and of good habit, fine for cut bloom, one of the best early kinds. Syn., Mad. C. Desgrange

MALTE BRUN, *Pom.* — Light pink, half incurved, distinct

MALVÆFLORUM, *Jap.*—Of a lovely fresh silvery mauve colour are the lower part of the petals, and towards the points they are gradually passing to white; novel and pleasing; should not be "stopped"; is a good late bloomer, turning pure white (Délaux)

MANDARIN, *Jap.*—Florets ligulate, delicate milk white, suffused with rose (Délaux)

MARABOUT, *Inc.* — Pure white of full size, elegantly fringed like a double white Pink. See also New Marabout

MARC AURÈLE, *Pom.*—Orange and red shaded, or purple tipped with gold. See Marcus Aurelius

MARCEAU, *L.* — Hybrid, rose, bordered white
MARCHIONESS, *L.fl.*—Large blush
MARCHIONESS OF LORNE. —Rosy
MARCUS AURELIUS, *Pom.*— See Marc Aurèle
MARÉCHAL DUROC, *Inc.* — Fine rose and lilac
MARÉCHAL LANNES, *L.fl.*— Dark blood red
MARÉCHAL NIEL, *L.*—Large, red and orange (Bonamy)
MARGARET OF NORWAY, *A.l.*—Light red and gold centre
MARGARET OF YORK, *A.l.*— Sulphur yellow. See also Marguerite de York
MARGARET VATCHER, *Inc.* —Large rose-pink and light centre (Smith)
MARGOT (1883), *J.*—Lilac and white, ribbon-like florets
MARGUERITE D'ANJOU, *Ane.l.*—Anemone, nankeen, very fine
MARGUERITE DE COI, *P.a.*— Purple, yellow centre
MARGUERITE DE VALOIS, *P.a.*—Anemone, white and yellow
MARGUERITE DE VERSAILLES, *L.a.* — Anemone, blush
MARGUERITE DE YORK, *A.l.* —Canary and dark yellow
MARGUERITE MONARCH, *Jap.*—Broad, flat florets, creamy yellow behind, ruby red above; large, full flowers
MARIE CROUZAT, *Pom.*—Florets claret, laced with white; a beautiful little gem (Lebois)
MARIE DUPUY, *Pom.*—White, tipped with rose
MARIE STUART, *P.a.*—Lilac blush, with high sulphur centre
MARIETTA, *P.a.*—Disc golden yellow, ray orange
MARIE VOZEL, *L.*
MARQUIS D'ALFARASI, *P.ear.* — Yellow, changing to white, flowers very small and produced early; a very pretty variety
MARQUIS OF LORNE, *Jap.*— Reddish carmine, spotted and tipped with yellow; a bold, semi-globular flower
MARQUIS DE MOULLEVILLE, *Inc.* — White, large incurved; very fine show flower
MARS, *Inc.*—Light red (Smith)
MARSEILLE, *P.ear.*—Rose-lilac (Pelé)
MARY LIND, *Pom.* — Sulphur blush (Smith)
MARY MAJOR, *Jap.*—Pure white (Veitch, 1882). Syn. Marie Mayer (Délaux)
MASTIC, *P.an.*—Bronze yellow (Lebois)
M. ASTORG, *Jap.*—Silvery white, centre silvery or violet-rose (Délaux)
MAZEPPA, *Inc.*—Shaded red
M. BARAT, *Jap.* — Crimson-red and brown (Délaux)
M. BLANC, *Jap.*—Frilled amaranth, centre silvery (Délaux)
M. BONAMY, *Jap.* — Pæony-shaped, clear amaranth, petals frizzed, curving inwards to the centre (Lacroix)
M. BOUCHARLET, *Pom.* (Dél.)
M. BOUCOT, *Jap.*—Flowers and florets large and of a tender rose colour, lined and flamed with violet (Boucharlet, 1885)
M. BOYER, *Jap.*—Silvery lilac, or rose, very fine (Délaux)
M. BRUNET, *Jap.*—Broad flat florets, white and blush
M. CAMILLE, *Pom.* — Small fringed flowers, clear rosy amaranth, tipped with white (Délaux)
M. CASTEL, *Jap.*—Flowers large double, formed of long twisted florets, fiery red above and yellow below (Délaux)

M. CHARLES HUBER, *Jap.*—An enormous flower, very double, with vertical florets, of a canary yellow colour; producing large trusses of from eight to ten very fine flowers

M. CHATÉ, *Jap.*—A beautifully formed quilled flower; outer florets of a rosy peach colour; central florets white, lightly tipped with rose (Pertuzés)

M. CHERVEUL, *Jap.* — Rosy crimson

M. COCHET, *Jap.* — White washed with rose, reverse violet-carmine (Délaux)

M. COMPTE, *Jap.*—Violet and amaranth (Délaux)

M. CROUSSÉ, *Jap.* — Crimson, backs of florets yellow, singularly bright and distinct; central florets incurved, and of a golden amber colour

M. DÉLAUX, *Jap.*—A very fine, full large flower of a rich reddish crimson colour; the florets, which are long and twisted, are of a beautiful golden yellow colour on their under side (Délaux)

M. DE VAZZA, *Jap.*—Rosy amaranth, tipped with white (De Reydellet)

M. DEVEILLE, *Jap.*—Fiery maroon, centre spirally twisted and golden yellow (Délaux)

M. DIXON, *Jap.*—Florets reflexed and of a clear rosy violet colour; very delicate (Délaux, 1885)

M. ÉLIE, *Pom.*—Silvery amaranth, white behind

M. HENRY JACOTOT, *Jap.*—Brown-crimson or velvet (1884)

M. IVON, *Jap.*—A shapely flower, having flat reflexed florets of a creamy whiteness, centre rose coloured, the florets being bordered with violet-carmine and tipped with gold (Délaux, 1885)

M. J. M. LOUREIROS, *Pom.* (Délaux)

M. LUQUET, *Pom.* (Délaux)

M. MACMAHON, *Jap.* — Lilac-rose, back of petals white

M. MARGOTTIN, *Jap.* — Florets wavy or actinoid, of a clear bright reddish crimson colour (Délaux, 1885)

M. MOUSSILLAC, *Jap.*—Dark crimson with a fiery centre, large and distinct (Délaux)

M. MOYNET, *L.* (Lacroix)

M. PERPIGNAN, *Pom.* (Délaux)

M. ROBILLARD, *Pom.* (Délaux)

M. TARIN, *Jap.*—Silver-rose or violet (Délaux)

MDLLE. ANNA DÉLAUX, *Jap.*—Twisted florets, like a cork-screw, of a milk-white colour, delicately tinted rose; a real gem (Délaux)

MDLLE. ANTOINETTE BRUNEL, *Jap.* — Florets quilled, colour carmine and white (Délaux)

MDLLE. AUGUSTINE GAUTHEUT, *Jap.*—Rose and flame colour, bordered white (Délaux, 1884)

MDLLE. BARTHÈRE, *Jap.*—(Délaux)

MDLLE. CELESTINE PHILOPAL, *Pom.*—Yellow

MDLLE. CROIZETTE, *L.*—Large, bright, rosy shaded flowers (Lemoine)

MDLLE. D'ARNAUD, *Pom.*—Rosy violet (Délaux)

MDLLE. DOMAGE, *L.*—Dark yellow

MDLLE. JOLIVART, *P.ear.*—Pure white, dwarf and pretty

MDLLE. LACROIX, *Jap.*—Pure white, fine and distinct (Lacroix, 1883)

MDLLE. L. DE TOULOUSE, *Jap.*—Incurved and beautifully frizzed, of a fresh rose colour, centre a yellowish white; flowers in bouquets of four or five together, very fine (Délaux)

MDLLE. LOUISE DE REYDELLET, *Jap.*—(De Reydellet)
MDLLE. L. SABATIE, *Jap.*—Bright rose-violet, lit up with white; large, full, good (1882)
MDLLE. MADELEINE TÉZIER (De Reydellet)
MDLLE. MANEY, *Pom.*—(Dél.)
MDLLE. MARTHÉ, *Pom.*—Golden (see Golden Mad. Martha)
MDLLE. MASSOT, *P.an.*—Anemone, the ray rosy crimson, the disc rose and yellow, fine
MDLLE. MATHILDE RAYNAUD, *Pom.*—Rose tipped with white, yellow centre (Délaux)
MDLLE. MÉLANIE FABRE, *Jap.*—Tender rose (Délaux)
MDLLE. MOULISE, *Jap.*—Good and showy
MDLLE. NINI, *Inc.*—Lilac shaded with white (Délaux)
MDLLE. OPOIX
MDLLE. POURQUIÉ, *Pom.*
MDLLE. SAVIGNY, *Jap.*—Flowers large and full, florets contorted, flowers of a rose or mauve colour, with a white centre (Délaux)
MDLLE. ZELIE DECAEN, *Pom.*—Flowers snowy white, and very double; superb (Lebois)
MEDORA, *P.an.*—Rose-lilac
MEDUSA, *Pom.*—Deep orange-brown with crimson tint (Salter)
MEG MERRILIES, *Jap.*—Sulphur-yellow, large and late blooming; one of the best
MÉLANIE ROBINET, *Jap.*—Colour lilac, white reverse (Délaux and Boucharlet)
MEMNON, *Inc.*—Peach or rose, and lighter centre, each floret being tipped with lilac (Downton)
MENTOR, *Inc.*—Rosy lilac with white reflex (L., 1884)
METEOR, *Jap.*—Bright golden yellow, changing to orange; florets very long and curiously curled; a very early and free-blooming variety of the actinoid class (Salter)
METEORE, *Pom.*—Rose with white centre imbricated and frilled; fine (Pertuzés)
M. EUGÈNE POURQUIE, *Jap.*—Flowers very double, with very long thin twisted petals, completely curled, colour salmony red, enlivened with gold, one of the best types of Japanese
MEXICO, *P.ear.*—Bright yellow (Pelé)
MEYERBEER, *Pom.*—Rose-purple
M. GILLY-BLANC, *Pom.*—(Boucharlet)
MICHELET, *Pom.*—Rosy buttons (Lemoine)
MIGNON, *Jap.*—Flowers in clusters of five or six, colour rose or rosy violet, whitish in the centre (Délaux)
MIGNONETTE, *Jap.*—Good late bloomer; crimson-red tipped with gold (Délaux)
MINIATA, *Pom.*—Creamy white (Boucharlet)
MINERVE.—Creamy rose
MINNIE CHATÉ, *Jap.* or *A.l.*—Creamy bronze, curiously twisted (like a large-flowered Anemone)
MINNIE WARREN, *Pom.*—Rosy blush, with yellowish centre (Salter)
MIRABELLE, *Pom.*
MIRA, *Pom.*—Pure white, very double (Lebois)
MIRANDA, *Pom.*—Bright rose, fringed
MIRON, *Jap.*—Light yellow, veering to pale red (Délaux)
MISS BECKWITH, *Pom.s.*—Single white, shaded lilac or blush (Teesdale)
MISS CANNELL, *Pom.s.*—Single pure white, ray florets with a yellow disc (Teesdale)
MISS CULLINGFORD, *L.fl.*—(Salter)

MISS E. BOUSTEAD, *A.l.*—White

MISS ELLEN TERRY, *Pom.s.*—Single ray florets magenta, disc yellow (Teesdale)

MISS ELEANOR, *Pom.*—Reddish cinnamon

MISS EYRE, *A.l.*—Blush with yellow centre, medium size, dwarf habit, and very free

MISS FOX, *Pom.*—Golden yellow

MISS F. SMEE, *Inc.*—French white

MISS HOPE, *Inc.*—Delicate lilac

MISS HUFFINGTON, *L.fl.*—(Salter)

MISS JEANNIE (First-class certificate).—A sport from Anna de Belocca. Colour rich canary yellow. Is perfectly distinct, and of unequalled value for decorative purposes and specimen culture, free blooming and very sweet-scented, and larger in size than the parent

MISS JULIA, *Pom.*—Good bronze or chestnut-coloured variety (Smith)

MISS KATE, *L.fl.*—Delicate lilac (Smith)

MISS LAVINIA HUTCHINGS, *Pom.*—Blush white, full rosettes one inch in diameter; florets tipped with purple behind (Langlois, 1880)

MISS MARÉCHAUX, *L.fl.*—Good late blooming variety. Syn., Thirza (Salter)

MISS MARGARET, *A.l.*—Pure white Anemone, with full high centre (Salter)

MISS MARY MORGAN, *Inc.*—Good pink, same as Pink of Perfection

MISS NIGHTINGALE, *P.an.*—Blush, with white centre; very full (Brown)

MISS OUBRIDGE, *Pom.*—Canary-coloured sport from Mdlle. Marthé (see Golden Madame Martha)

MISS PRIM, *Pom.*—Hybrid, clear yellow

MISS SLADE, *Inc.*—Pale sulphur (Smith)

MISS TALFOURD, *Pom.*—Pure white (Smith)

MISS WETHERALL, *Inc.*—White

MISS WHEELER, *Pom.*—Clear rosy cinnamon

MONARCH, *Inc.*—Dark Indian red; back of the florets golden yellow; finely incurved and of immense size; a magnificent show flower

MODEL, *Pom.*—Lilac-pink (see Model of Perfection)

MODEL, *Jap.*—Crimson and bronze

MODEL OF PERFECTION, *Pom.*—Lilac and white, very full (see also Model and Modèle) (Forsyth)

MODÈLE, *Pom.*—White

MONICA, *Inc.*—Golden orange (Smith)

MON BIJOU, *Jap.*—Mahogany brown, pointed with golden yellow, reverse yellow (Délaux)

MON CAPRICE, *Pom.*—Striped purple (Rendatler)

MON CAPRICE, *Pom.*—(Délaux)

MONS. A. DUFOUR, *P.ear.*—Bright rosy purple; good

MONS. ARDENNE, *Jap.*—Fine rich bloom (Lacroix)

MONS. ASTORG, *Jap.*—Large flat white florets in the way of Elaine (1883)

MONS. A. VILMORIN, *Jap.*—Orange-crimson (Délaux)

MONS. BACO, *Jap.*—Vivid crimson and orange with golden centre, two colours in contrast like a Cocardeau aster (see Commandant Baco)

MONS. BOYER, *Jap.*—Large rosy lilac (Hackney, 1883)

MONS. BRUNET, *Jap.*—Pink, large and full (1883)

M. BURNET, *Jap.*—Pale pink, good

MONS. CASTEL, *Jap.*—(Veitch)
MONS. CHATÉ, *Jap.* — Light rose, tipped gold
MONS. CHEVREAUL, *Pom.*— Rosy lilac, tipped yellow
MONS. DÉLAUX, *Jap.*—(Veitch)
MONS. DESBRIEUX, *Jap.* — First-class, R.H.S., 1882. Bronze or orange, full, large narrow florets (Délaux)
MONS. DESCHAMPS, *Lft.*— Canary yellow, flowers large, for specimen growing
MONS. DE SOULAGES, *P.ear.* —Rosy purple
MONS. DUARTE OLIVEIRA, junior, *Jap.*—(Pynaert)
MONS. ELIE, *Inc.*—Amaranth, reverse of petals white
MONS. FITTÈRE, *Inc.* — Rich violet lined and shaded with white (Délaux)
MONS. FREEMAN, *Jap.*—Silver rose shaded violet (Délaux)
MONS. GARNIER, *Jap.* — Orange-maroon (Délaux)
M. GHYS, *Jap.*—Rosy salmon, centre golden, florets spiral and contorted (Délaux)
MONS. HARMAN PAYNE, *Jap.* —Crimson shaded with brownish black, flamed and tipped with yellow; central florets spiral; a seedling from Marguerite Marrouch (Délaux, 1885)
MONS. HENRI JACOTOT, *Jap.* —Orange-purple, and gold-shaded (Délaux, 1883)
MONS. HENRI JACOTOT, *Pom.* —(Délaux)
MONS. J. C. EGUILEOR, *Jap.* —(Veitch)
MONS. JOHN H. LAING, *Jap.* —Florets spiral, red-crimson or brown and gold (Délaux)
MONS. JUAN CRUZ DE EGUILEOR, *Jap.* — Large flowers, with long, thin, twisted petals, drooping edges, then incurving towards the centre, forming a large ball of beautiful golden yellow, which contrast perfectly with the colour of the flower, which is a most brilliant crimson strongly marked with vivid flame. The colouring of this variety is the most brilliant in existence.
MONS. LASSERRE, *Jap.*—Red, shaded with yellow (Délaux)
MONS. LE CTE. LE COUTEUIX, *Pom.*—(Boucharlet)
MONS. LEMOINE, *Jap.* — A large double flower of rich reddish crimson colour, tipped with bright yellow, golden centre, the reverse of the florets buff yellow; distinct and striking (Délaux)
MONS. LEMOINE, *Jap.* — Medium sized bi-colour, outer florets yellow, inner ones deep bronzy red; effective (Jackson, 1879)
MONS. LEON BRUNEL, *Jap.* —Ligules brown, or reddish brown tipped with gold (Délaux)
MONS. LOUIS BARTHÈRE, *Jap.*—Dark velvety purple, bordered with golden yellow (Dél.)
MONS. LUCIAN BERTHEIER, *Jap.*—Good (Veitch)
MONS. LUQUET, *P.ear.*—Good purple, a profuse bloomer in September
MONS. MANEY, *Jap.* — Good double flowers, violet, shading to white (Délaux)
M. MARROUCH, *Jap.*—Crimson and gold (Mahood)
MONS. MONTARIOL, *Pom.*— Very full amaranth, tipped white (Lacroix)
MONS. MOUSSILAC, *Jap.* — Style of James Salter, rich crimson-purple (1883)
MONS. NARDY, *Jap.*—Rosy red, back of petals white
MONS. N. DAVIS, *Jap.*—Large and double, reddish crimson or blood coloured (Délaux, 1885)

M. PAUL FABRE, *Jap.*—Very large and double, colour crimson-brown, gold centre (Délaux)
MONS. PLANCHENAU, *Jap.* (Délaux)
MONS. PLANCHERON, *Jap.* (Veitch)
MONS. RAOUX, *Jap.*—(Délaux)
MONS. RICHARD LARIOS, *Jap.*—Rich purple, striate (Dél.)
MONS. ROMAIN, *Jap.*—Deep gold thread-like plants, good (Délaux, 1883)
M. ROUS, *L.fl.*—Pæony shape and of a chamois yellow colour (Boucharlet)
MONS. SABATIÉ, *Jap.*—(Dél.)
MONS. SIGNET, *Pom.*—Deep purple, fine and full (Veitch, 1883)
MONS. ULRICH, *Pom.*—Purple, tipped white
MONS. URGEL, *Jap.* — Deep bright red approaching scarlet (Délaux, 1885)
MONS. VALLETTE, *Jap.*—Brick red shaded with copper (Délaux, 1884)
MONS. VINTOUSKI, *Jap.*—Crimson-brown and chamois (Délaux)
MONS. VIVIAND-MOREL, *Jap.*—White and yellow (Délaux)
MONT D'OR, *Pom.*—Golden orange (Boucharlet)
MONTE CRISTO, *Pom.s.*—Single, ray florets deep rosy lilac, with a white band around the yellow disc (Teesdale)
MONT ETNA, *Pom.*—Red (see Mount Etna)
MONTGOLFIER, *Pom.*—(Lemoine)
MONT VÉSUVÉ, *L.fl.*—Large fiery red
MOUNT EDGCUMBE, *Inc.*—Transparent sulphur white, delicately tinted with rose; very large, double and beautifully incurved
MOUNT ETNA, *Pom.*—Red, fine colour (see Mont Etna)
MR. ACHILLE DUTOUR, *P.ear.*—Pure white
MR. ASTIE, *P.ear.*—Golden yellow, dwarf and splendid form
MR. BARNES, *Jap.*—Fine buttercup yellow
MR. BATEMAN, *Pom.*—Hybrid Pompon; sport from Miss Walker
MR. BROOM, *Inc.*—Dark red
MR. BRUNLEES, *Inc.*—Large Indian red or maroon, gold tips (Smith)
MR. BUNN, *Inc.*—A root sport from Beverley, of the same habit, but a better and a longer petal, deeper colour, and altogether a finer flower; yellow with broad incurved florets
MR. COBAY, *Inc.*—Ruby red, fine flower. It is a sport from Prince of Wales; good and free
MR. COLE, *A.l.*
MR. CULLINGFORD, *Inc.*—Dark purple
MR. DE MARSAC, *Pom.*—Red-orange. Syn., M. de Marsac
MR. DESCHAMPS, *L.fl.*—Canary yellow. Syn., M. Deschamps
MR. EVANS, *Inc.*—Dark chestnut. Syns., Oliver Cromwell and E. Sanderson
MR. F. SMEE, *P.ear.*—Pale rose
MR. GLADSTONE, *L.fl.*—Dark red-chestnut, fine distinct colour, very effective. More varieties in this way are to be desired
MR. HOWE, *L.fl.*—Orange-amber
MR. JAMES LAING, *Inc.*
MR. JAY, *Inc.*—Red-orange
MR. J. STARLING, *Jap.*—Rose-lilac, shaded white, dark crimson centre, good (1882)
MR. LEFEVRE VALÈRE, *Pom.*—Chrome yellow
MR. MENIERE, *Pom.*
MR. MINET, *Pom.*—Red, orange border

MR. MURRAY, *Inc.*—Violet-rose, very full (Smith)

MR. RIEUX, *Jap.*—Florets narrow, rich orange. Syn., M. Raoux

MR. SCHMIDT, *P.s.* — Golden yellow, bordered with crimson (Pelé)

MR. TOOLE, *Pom.s.*—Good clear yellow (Teesdale)

MR. VAN HOUTTE, *Pom.* — Chestnut

MR. WELLS, *Jap.s.*—Rosy magenta, large and showy (Thorpe)

MR. WYNESS, *Inc.*—Violet-puce, very rich colour (Pethers)

MR. W. PIERCY, *P.ear.*—Mr. Piercy is the champion grower of this race, according to Mr. Cannell; blood red; a sport from Mdme. Pecoul, and sometimes called Red Piccol, a corruption of Pecoul

MRS. BATEMAN, *Pom.*—Bright rosy cinnamon; improved sport from Miss Wheeler

MRS. BRUNLEES. — Delicate rose-pink, with a light centre (Smith)

MRS. C. CAREY, *Jap.*—White, much curled, large blooms, exceedingly strong grower with bold foliage; will make exhibition plants as freely as Fair Maid of Guernsey. It is one of the best of late blooming varieties, as Mr. Cannell says, "It will not bloom until it has had its Christmas holiday." Quite distinct, and worthy of careful culture (Carey)

MRS. C. LANGLOIS, *Pom.*—Rosy pink, blooms 2 inches in diameter, florets broad, full centre (Langlois, 1880)

MRS. CULLINGFORD, *P.ear.*—Large pure white flower, very useful for cutting and for decorative purposes generally (A. Salter)

MRS. CUNNINGHAM, *Inc.*—Large, white

MRS. DIXON, *Inc.*—Fine form, being a golden sport from George Glenny, very good and free in habit; a sure bloomer. Also known as Golden George Glenny

MRS. DIX, *Pom.* — Soft blush, bordered with rose (Smith)

MRS E. MILES.—Bright yellow, incurved (Smith)

MRS. FORSYTH, *L.fl.*

MRS. FORSYTH, *Ref.*—White

MRS. G. PARNELL, *Inc.*—White, tinted yellow

MRS. G. RUNDLE, *Inc.*—Splendid white; one of the very best of all incurved white varieties for all purposes. It is particularly good in habit when well grown; flowers are perfect

MRS. GUSH, *P.an.*—Bright rose

MRS. HALIBURTON, *Inc.* — Slightly quilled florets, but beautifully incurved, forming a fine deep bloom, primrose - white (Smith)

MRS. HEALE, *Inc.*—Fine bold flower, good for exhibition

MRS. HUFFINGTON, *Pom.*—White, tipped with pink

MRS. HUTT, *Pom.* — Reddish brown

MRS. JOHN CROSSFIELD, *Inc.*—A sport from White Globe, having large shapely blooms of a rosy pink shade (Veitch, 1st class, Liverpool, 1882)

MRS. JOHN WILLS. — Good white suffused with pink, large and effective

MRS. KAINES, *Inc.* — Transparent blush, a beautiful late-flowering variety (Davis)

MRS. KELLOCK, *P.s.*—Large, single, rosy lilac flowers; distinct and good (Teesdale)

MRS. LANGTRY, *P.s.* — Silvery blush, useful for cut flowers and decorative uses (Teesdale)

MRS. MAJOR, *L.fl.*—Deep rose

MRS. MARIGOLD, *Jap.* — A Japanese variety, having pink or flesh-coloured florets, long, narrow, and full, but smaller than Elaine; sport from Miss Mary Morgan (Gallier, 1881)
MRS. MILES, *Inc.*—Yellow
MRS. MOGGRIDGE
MRS. PETHERS, *A.l.*—Rose-lilac (Pethers)
MRS. SHARPE, *Inc.* — White, tipped with rose; *vide* Dr. Sharpe for parentage, &c.; syn., Incognito (Harding, 1865)
MRS. SHIRLEY HIBBERD, *P.an.*—Rose-lilac and gold centre (Smith)
MRS. STEWART, *L.fl.*—Brassy amber
MRS. TOWNSHEND, *Jap.* — Bright orange-red or maroon, narrow twisted florets (Mahood, 1883)
MRS. TURNER, *Pom.* — Pure white (Smith)
MRS. WALTER BUTTERS.— Sport from Princess Beatrice and like it in form; reddish brown and amber; distinct
MRS. WESTON, *Inc.*—Rosy lilac; sport from White Venus
MRS. WESTWOOD, *P.an.*—Silvery lilac
MRS. W. HOLBORN, *Inc.*—Ivory white, large (Smith)
MRS. W. SHIPMAN, *Inc.*—Fawn colour, quite distinct
MRS. WOOD, *P.ear.*—Good and free, of a bronzy yellow. Syn., Le Luxembourg
MRS. WYNESS, *P.an.* — Rose-lilac, high centre (Wyness)
MULBERRY, *Inc.*—Dark, mulberry (Downton)
MUSIDORA, *Pom.*—Liliputian, chestnut-red and orange (Smith)
MUSTAPHA, *Pom.*—Dark crimson-brown, very good
NAGASAKI, *Jap.*—See Nagasaki Violet
NAGASAKI VIOLET, *Jap.* — Deep rich violet-purple, sweet scented
NANCY DE SERMET, *A.l.*— White (Smith)
NANDEE, *L.fl.*
NANON, *Pom.*—Bright orange
NANUM, *P.ear.* — Dwarf and early, silver, blush, or flesh colour
NEGRO BOY, *Inc.*—Dark crimson-purple (Clark). See also Le Nègre, *Jap.*
NELL GWYNNE, *L.fl.* — Rosy peach (Smith)
NELLY, *Pom.*—Good free, late white, tinted sulphur or orange in the centre
NE PLUS ULTRA, *Jap.*—Dark chamois, spotted with yellow, well formed and very double (Délaux)
NE PLUS ULTRA, *Ref.*—Syn., Christine
NEW DEPARTURE, *P.s.*—Single Pompon, disc golden, ray of flat white florets (Teesdale, 1882)
NEW MARABOUT, *Pom.* — White and pale lilac (1883)
NEW YORK, *Jap.*—Red-amaranth (Délaux)
NIL DESPERANDUM, *Inc.* — Large dark red, shaded with orange (Smith)
NINETTE, *Pom.* — Liliputian, sulphur-rose, very double and fine
NIOBE, *Inc.*—A pale sport of Nil Desperandum
NITIDA, *Pom.*—Blush white
NOISETTE, *P.s.* — Red, shaded with brown, deep orange, centre flowers in clusters
NONPAREIL, *L.fl.*—Rosy lilac
NORA, *Jap.*—Pink or peach (Dél.)
NORAH, *Jap.*—See Nora
NORMA, *Inc.*—Ivory white
NOVELTY, *Inc.* — Good early kind, large white, suffused with rose (Clark)

NUIT D'AUTOMNE, *Jap.* — A very fine variety with partially incurved flowers of a fiery crimson-amaranth colour

NUIT D'HIVER, *Jap.*—Saffron bronzed, shaded with brown, pointed with golden yellow, reverse saffron-yellow, dwarf and free (Délaux)

NYMPH, *Jap.*—See La Nymphe

OBSERVATION, *P.ear.* — Red and salmon (Pelé)

O. KIKU, *Jap.*—Buff, sport from Bismarck

OLIVAR, *Pom.* — Lively orange (Bull)

OLIVER CROMWELL, *Inc.*— Dark chestnut-red, lighter in the centre. See Mr. Evans (Smith)

ORACLE, *Jap.*—Large, flat, erect florets, broader than those of Ethel, and of a rosy lilac colour, inclining to purple (Lemoine)

ORANGE ANNIE SALTER, *Ref.*—A sport raised by M. Ozard, and sent out by Mr. Salter; orange-yellow, one of the best for specimens

ORANGE BEAUTY, *Pom.* — Flowers in a dense cluster of four or more at the extremity of every shoot; bright yellow and orange (A. Salter)

ORANGE BOVEN, *Pom.*—Dark orange (Salter)

ORANGE BRILLIANT, *Inc.*— Bright orange

ORANGE PERFECTION, *Inc.*— Salmon-orange (Smith)

ORANGER, *Pom.*—Orange

ORLANDO, *L.fl.* — Rosy buff (Smith)

ORPHÉE, *Jap.*—Reddish crimson, very fine variety (Délaux)

OSCAR WILDE, *P.s.* — Bright red, with long fringe-like florets

OSSIAN, *L.fl.*—Large rose

OTHELLO, *Inc.* — Dark rose (Smith)

PABLO, *Pom.*—Hybrid Pompon of full size, rose tinged with purple, and finely fringed (Bull)

PAN, *L.fl.* — Large red-salmon (Clark)

PANDARA, *Pom.*—Deep crimson, spotted orange (Bonamy)

PANDORA, *Inc.*—Rosy nankeen (Smith)

PAQUERETTE, *Pom.* — Rosy lilac, shading to white, yellow centre (Boucharlet)

PARASOL, *Jap.*—Flowers large, of a golden chamois tint, and distinct in form (Lacroix)

PATIENCE, *P.s.*—Soft amaranth, florets tipped with white

PATRIE, *L.fl.*—(Bernard)

PATROLLIN, *Jap.* — Large flowers, florets contorted or twisted, of a rosy lilac tint, white behind (Délaux)

PAUL LECROIX, *Jap.*—(Lec.)

PEACH CHRISTINE, *Ref.*— Rosy peach. See Ne Plus Ultra

PEARL, *Inc.*—White pearl, pure white (Smith)

PEARL, *Pom.*—Deep rose

PECOUL, MADAME, *P.ear.*— See Madame Pecoul

PELAGIA, *L.fl.*—Bright orange-cinnamon, of dwarf habit (Smith)

PELICAN, *Jap.* — Very large blooms; florets large, creamy white (Boucharlet, 1885)

PENELOPE, *Inc.*—Rosy orange (Clark)

PÈRE DÉLAUX, *Jap.*—An attractive variety with immense flowers of a rich velvety reddish brown colour; remarkably showy (Délaux)

PERFECTION, *Pom.* — Reddish brown, tipped gold (Délaux). See Cadic's Perfection

PERICLES.—Purple, edged with gold, extra

PERLE, *P.an.*—Pearly white, fine, and free

PERLE DES BEAUTÉS, *Pom.*—Flowers ranunculus-like, imbricated, fiery amaranth, velvety, tipped with dark brown (Délaux)

PERLE DES BLANCHES, *Jap.*—White, very fine (Lacroix)

PERLE DES BLANCHES, *Jap.*—In way of Fair Maid of Guernsey, but distinct; white (Jackson, 1882)

PERTUZÉS, *Pom.* — Nankeen-orange (Bull)

PETER HENDERSON, *Jap.s.*—Dark reddish brown, yellowish reflex (Thorpe)

PETER THE GREAT, *Jap.* — Fine large flowers of a lemon-yellow colour; very free. One of the best, good alike in habit and flower. Most useful, and a sure bloomer. Also known as Czar (Major Carey)

PETIT FRISI, *Jap.*—Soft rosy carmine, centre of white and gold; very distinct and good (Délaux, 1882)

PETIT MIGNON, *Pom.*—Tender rose, very double (Délaux)

PETIT NOBERT, *Jap.* — Rosy carmine shaded with silvery rose and bordered with pure nankeen yellow. Backs of the florets golden; good (1882)

PHAETON, *L.fl.* — Large dark golden orange

PHARE DE MESSINA, *L.fl.*

PHIDIAS, NEW, *L.fl.*—Rose and blush

PHŒBUS, *L.fl.*— Bright dark orange (Clark)

PHYLLIS, *P.s.*—Reddish crimson, with orange centre

PICTURATUM ROSEUM, *Inc.*—Red-salmon (Clark)

PIETRO DIAZ, *Pom.*—(Lacroix)

PILOT, *L.fl.*—Deep rose

PINK PEARL, *Inc.* — Delicate pink with silver shade, finely incurved (Smith)

PINK PERFECTION, *Inc.* — Lilac. Sometimes called Pink of Perfection, and very similar to Alfred Salter. See Miss Mary Morgan (Rundle)

PIO NONO, *Inc.*—Indian, red and gold points

PLANTAGENET, *Jap.* — Good and showy

PLUIE D'OR, *Jap.*—Spiral blooms medium size, round and very double, large and well-finished petals of a beautiful jonquil yellow; distinct from all the yellow varieties, and one of the best that exists (Délaux)

PLUTUS, *Inc.*—Bright gold, incurved

POISON D'OR, *L.fl.* — Golden orange or yellow (Goldfish)

POITEAU, *Pom.* — Yellow (Lemoine)

POLYCARP, *Pom.* — Chestnut and orange (Salter)

POLYCARP, *Pom.*—Clear peach-fringed. Sent out by Mr. Bull, (Mee)

POMONA, *Inc.* — Dark orange-fawn

POMPEII, *Inc.*—Cinnamon and orange (Clark)

POMPON TOULOUSAIN, *Pom.*—Red, good and free

POMPONIUM, *Pom.*—Deep yellow (Délaux)

POUDRE D'OR, *L.fl.*— Reddish orange; very early

PRÉCOCITÉ, *P.ear.*—Golden yellow, orange centre. One of the best of its class. Gold Button and Hendersoni are alike, and often are sold as Précocité (Boucharlet)

PRESIDENT DECAISNE, *Pom.*—Rosy carmine, violet scented

PRESIDENT LAVALLÉE, *L.fl.*—Very large, red-purple with yellow reflex (Pertuzés)

PRESIDENT MOREL, *P.an.*—Red, extra fine

PRESIDENT, *Pom.*—Rosy carmine

PRINCE ALBERT, *L.fl.*—Bright crimson, large and fine (Wolsey)

PRINCE ALBERT, *Ref.*—Bright crimson-brown, good

PRINCE ALFRED, *Inc.*—Splendid rose-crimson, very large (Davis)

PRINCE CONSORT, *Inc.*—Large violet-crimson (Clark)

PRINCE DE CONDE, *Rec.*—Rosy violet

PRINCE JEROME, *L.fl.*

PRINCE OF ANEMONES, *A.l.*—Large lilac-blush, and fine high centre (Brown)

PRINCE OF ORANGE, *Pom.*—Fine late

PRINCE OF WALES, *Inc.*—Dark violet-purple, or bright fiery red. Raised in Norfolk, by Mr. Freestone, about the year 1835. See frontispiece to Salter's "Chrysanthemum" (Freestone)

PRINCE VICTOR, *Ref.*—Dark red

PRINCESSE, *L.fl.*—(Boucharlet)

PRINCESSE IMPERIALE, *Inc.*—Primrose-yellow. See Lord Alcester

PRINCESS ALEXANDRA, *Inc.*—Delicate lilac-blush (Smith)

PRINCESS ALICE, *Inc.*—Carmine (Smith)

PRINCESS BEATRICE, *Inc.*—Lilac-pink (Salter)

PRINCESS LOUISE, *A.l.*—Large rosy lilac, fine for cutting late, ray florets quilled, forming a full high centre, very fine

PRINCESS LOUISE OF HESSE, *Inc.*—Rose-pink or blush (Smith)

PRINCESS MARGUERITE, *A.l.*—Lilac-pink with lighter centre (Salter)

PRINCESS MARIE, *Inc.*—Rose, incurved

PRINCESS MARY.—Large pearl white, incurved (Smith)

PRINCESS OF TECK, *Inc.*—Fine ivory white, good for late blooming (Pethers). Syn., Christmas Number

PRINCESS OF WALES, *Inc.*—Pearl white, delicately tinted rose-lilac, very large. Like Mrs. Heales (Davis)

PRINCESS THYRA, *L.fl.*

PRINCESS, *L.fl.*—White-lilac

PRISCILLA, *Pom.* — Orange quilled

PROGNE, *Ref.*—Purple-amaranth or violet-purple. One of the finest in colour, and perfumed like violets

PROGRÈS TOULOUSAIN, *Jap.*—Reddish crimson

PROMETHEUS, *Inc.* — Bright fiery red-salmon (Pethers)

PROSERPINE, *Pom.*—Dwarf yellow (Bull)

PROSPÉRITÉ, *Pom.*—(Lemoine)

PROSPERO, *Pom.*—Deep purplish violet (Salter)

PSYCHE, *Inc.* — Pure yellow (Smith)

PURPLE KING, *Jap.*—Recurved petals, purple, shaded with magenta and mauve (Veitch)

PURPLE LUCINDA, *P.ear.*—Purplish violet

PURPLE POMPON, *Pom.* — (Veitch)

PURPLE PRINCE, *Jap.*—Fine purple-maroon

PURPUREUM ALBUM, *Jap.*—Rich amaranth-purple, mottled and spotted white, flower-heads of medium size, and not unlike a bunch of purple and white ribbon formed into a loose tassel (Salter)

PURPUREUM ELEGANS. — Purple-crimson

PYGMALION.—Purple-crimson

PYGMALION. — Red-carmine (Smith)

PYRAMIDALE, *Jap.*—See Pyramidalis (Bonamy)

PYRAMIDALIS, *Jap.* — Flowers small and very double, petals quilled, canary yellow, changing to brick-red, flowering in pyramids; plant dwarf; colour quite new (Bonamy)

PYRON, *Inc.* — Red-chestnut, tipped gold

QUEEN MARGARET, *A.l.* — Good rose-lilac with a double row of ray florets (Smith)

QUEEN OF ANEMONES, *P.an.* —Rosy red (Bird)

QUEEN OF ENGLAND, *Inc.*— Splendid blush coloured (Smith)

QUEEN OF ENGLAND, WHITE *Inc.*—Quilled white

QUEEN OF ENGLAND, GOLDEN, *Inc.*—(See Golden Queen of England), do. do. with yellow flowers, immense blooms

QUEEN OF LILACS, *Inc.*— Rose-lilac (Smith)

QUEEN OF THE ISLES, *Inc.*— Pure white (Smith)

QUEEN OF THE WHITES, *Inc.* —Large white

QUILLED BEAUTY, *L.fl.* — Orange-cinnamon, very double (Smith)

QUILLED PINK, *L.fl.*—Rose-lilac

QUILLED WHITE, *L.fl.*—Pure white

QUINTUS CURTIUS, *L.fl.*—Salmon and orange

RABELAIS, *Inc.*—Carmine and yellow

RANUNCULUS, *Inc.*— Purple-maroon of medium size (Smith)

RAYMOND, *Inc.*—Golden fawn

R. BALLANTINE, *Jap.*— Rich carmine-violet, fine and distinct, new shape with broad florets having folded edges (1882)

RED DRAGON, *Jap.*—Indian or nasturtium red and bronze shaded (Salter)

RED GAUNTLET, *Jap.*— Dark red florets (Major Carey)

RED INDIAN, *Jap.*—Indian red. See Inner Temple or Aregina (Cannell, 1883) (?)

REFULGENCE, *Inc.*—Red purple maroon (Refulgence is often miscalled Refulgens)

REGULUS, *A.l.*— Cinnamon or bronze

REGINA, *Jap.*—Good yellow, late, dwarf, and of strong growth

REINE DES ANEMONES, *P.an.* —White

REINE BLANCHE, *L.fl.*—Pure white. See Reine des Blanches (Boucharlet)

REINE DES BEAUTÉS, *Jap.*— Bright crimson (Délaux)

REINE DES BLANCHES, *L.fl.* —White with a lilac reflex, pure white in greenhouse (Boucharlet)

REINE DES PANACHÉES, *Pom.*—Blush pencilled rose

REINE D'OR, *Pom.* — Perfect little orange buttons, tipped with golden yellow (Délaux)

REINE MARGUERITE, *P.an.*— Anemone, white and rose

RETICULATA, *Inc.*—See Reticulatum

RETICULATUM, *Inc.* — Good bronzy red

RÊVE DE PRINTEMPS, *Jap.*— Dwarf habit, flowers large and very double, colour deep rich violet-carmine, petals incurving towards the centre, forming a ball of silvery white of great purity, very lasting. The flowers resemble wreaths of China asters

REVERIE, *Inc.*—Very large, in bouquets of four or five flowers, orange, tinted red, with golden centre

REV. J. DIX, *Inc.*—Orange-red with a lighter centre (Davis)

REX RUBRORUM, *Jap.*—Crimson-maroon (Veitch, 1882)

RICHARD LARIOS, *Jap.*—Fine large petalled rosy flowers shaded violet, flamed with white; very distinct in colour (Délaux)

RICHE BOUQUET, *Jap.*—Dwarf habit, very double and free; ground colour whitish lilac shaded rose; petals bordered with pure white, golden centre, early variety, extra fine (Délaux)

RIFLEMAN, *Inc.*— Dark ruby (Clark)

RINGLEADER, *Pom.*—Sent out by Veitch, 1882. Flowers subglobose, very compact, pale purple suffused with white. A very distinct and pretty quilled variety (A. Salter)

RIQUIQUI, *Pom.*—Violet plum

RIVAL LITTLE HARRY, *Inc.*—Golden yellow, copper coloured (Rundle)

ROBERT JAMES, *Inc.*—Vivid cinnamon and orange (Smith)

ROI DES PRÉCOCES, *Jap.*—Rich dark fiery crimson; ligules reflexed (Délaux)

ROI SOLEIL, *Jap.*—Gold, bright and good (Veitch)

ROLLA, *L.fl.*—Purple-lilac and silvery shade (Smith)

ROQUELAURE, *Pom.*—Red and orange

ROSA BONHEUR, *Jap.*—Bright rose or violet-rose, very free

ROSA PUNCTATA, *Jap.*—See Roseum punctatum

ROSA MYSTICA, *Inc.*—Creamy rose

ROSE MARGUERITE, *P.an.*—Rosy Anemone flowers, free and good

ROSEUM PUNCTATUM, *Jap.*—White florets, spotted with rose

ROSE CÉLESTE, *Jap.*—Florets tubular, colour rose, shading to silvery white (Délaux)

ROSE D'AMOUR, *Ref.*—Magenta red

ROSE MIGNONNE, *Jap.*—Delicate rose, striped white

ROSEO-ALBUM, *Jap.*—Amaranth-rose, tipped with white (Salter). Syn., Roseum album

ROSE POMPON, *Pom.*—Silvery lilac

ROSE TREVENNA, *Pom.*—Rose, early flowering; very free habit, flowering in wreaths; very useful (Smith)

ROSEUM ALBUM, *Jap.*—(Salter)

ROSEUM PICTUM, *Jap.*—Rose-crimson

ROSEUM SUPERBUM, *Jap.*—Bright rosy purple (Dél., 1883)

ROSEUM SUPERBUM, *Pom.*—(Boucharlet)

ROSINA, *Pom.*—Tender rose, reverse carmine (Bull)

ROSINANTE, *Pom.*—(Salter)

ROTUNDIFLORUM.—White petals and tinged peach, centre yellow; pure white in greenhouse (Payne)

ROUX, MAD., *Jap.*—Flower large, with laciniate florets of a soft red colour lined with white (Lacroix)

ROYAL PURPLE, *L.fl.*—Bright purple; fine imbricated flower; centre petals tipped with yellow

R. T. BIGGS, *Jap.*—Dark amaranth

RUBRUM PERFECTUM, *Pom.*—Purplish crimson, amaranth reflex (Boucharlet)

RUBRUM STRIATUM, *Jap.*—(Délaux)

RUTH, *L.fl.*—Large golden orange, very full, fine

STRIATUM PERFECTUM, *Jap.*—(Délaux)

STRIATUM RUBRUM, *Jap.*—Large flower, with petals broader than the preceding, ground colour light gold, completely lined, flamed and streaked with violet and crimson-red. The markings are of great beauty, a real novelty (Délaux). See Rubrum striatum

SABRINA, *L.fl.*—Large, blush, changing to cherry

SACCOI VERA, *Inc.*—Large, lilac and rose (Clark)

SADDINGTON, *P.ear.*—Pink and white, early flowering. Syn., St. Crouts

SAFFRANUM, *Jap.* — Creamy blush, with pale gold centre; guard florets long and spreading, very distinct and effective (Jackson, 1st class R.H.S., 1882)

SAGITTA, *Pom.*—Blush

SAINTE THAIS, *Pom.*—Chestnut-orange. Thais is the proper name of this variety

SAINT JUSTIA, *Pom.*—Red and orange (Hayes)

SAINT MARGARET, *A.l.* — Brassy orange (Pethers)

SALAMON, *P.ear.* —Dark rose-carmine

SALTERI, *Jap.*—Bright orange-red, fine distinct var. (Salter, 1883, Veitch)

SALTER'S EARLY BLUSH, *P.ear.* — See Early Blush (A. Salter)

SAMUEL BROOME, *Inc.*—Red-cinnamon, with orange centre (Smith)

SAM SLICK, *Ref.*— Ruby, with bronze points (Smith)

SAM WELLER, *Inc.*— Indian red and golden tips (Salter)

SANGUINEUM, *Inc.*—Light red-crimson (Pethers)

SANGUINEUM, *Pom.*—Pompon of a blood-red colour, tinged with citron in the centre (Schwartz)

SANSPAREIL, *Jap.* — Flowers small and double; petals quilled, of a beautiful red-madder colour, dotted with bright golden yellow; colour most distinct and new (Boucharlet)

SANS SOUCI, *Pom.*—Rosy violet streaked with white (Délaux)

SAPPHO, *L.fl.*—

SARNIA, *Jap.* — White pink striped, very large and distinct variety

SARNIA GLORY, *Inc.*—Rosy lilac (Major Carey). Syn., Sarnia

SATANELLA, *Pom.* — Orange-amber (Hayes)

SAUMAREZ, *Inc.*—Bright chestnut-red (Smith)

SCARAMOUCH RANUNCULIFORM, *Pom.*—White, striped with yellow; perfect

SCARLET GEM, *P.ear.*—Dwarf; crimson-scarlet profuse; best bedding variety, good for pots and market culture. Called also Little Bob and Dr. Bois Duval (Smith)

SECRETAIRE DAUREL, *P.ear.* —Rosy lilac, sometimes striped with bright rose (Pertuzés)

SÉMIRAMIS, *Ref.*—(Lemoine)

SENSATION, *Pom.*—Variegated foliage

SERAPH, *Inc.*—Sulphur with yellow centre (Smith)

SESOSTRIS, *Jap.*—Flowers double, of a mahogany colour, the centre of flower beautiful golden yellow (Lemóine)

SHO-GAKKO, *Jap.*—Pæony formed, lobulated petals, amaranth (Délaux). See Da Jakko and Da Gakko

SICILÈ, *P.ear.* —Lilac and blush (Pelé)

SIDONIA, *Jap.s.*—Dark pink surface, rosy purple reflex, having three or four rows of ray florets (Thorpe)

SIDONIE, *P.an.*—Lilac, with high blush centre, full sized

SIENNA, *Pom.*—Dark red-orange (Salter)

SIGNORA PÉPIN, *Pom.*—Red-carmine and yellow

SILOE, *Pom.*—Bronze-coloured, petals laciniated (Lebois)

SINBAD, *Pom.*—Orange (Salter)

SINGLE WHITE, *Pom.s.*—Outer florets broad and spreading; centre golden. Figured in *The Garden*

SIR BEAUCHAMP SEYMOUR, *Inc.*—Broad incurved petals, bronzy red, the reverse paler. Quite a new colour

SIR GEORGE BOWYER, *Inc.*—Dark rose-purple (Pethers)

SIR ISAAC BROCK, *Jap.*—Yellow (Major Carey)

SIR H. HAVELOCK, *Inc.*—See Insigne

SIR RICHARD WALLACE, *Pom.*—Rose (Lemoine)

SIR STAFFORD CAREY, *Inc.*—Dark brown-chestnut, with golden points (Pethers)

SISTOU, *P.ear.*—See Nanum

SISTOU LAPIERRE, *P.ear.*—Plant dwarf and floriferous, bearing lilac flowers (Pertuzés)

SNOWBALL, *Ref.*—Full flower, very double, pure white; fine for specimens or cut bloom (Smith)

SNOWDROP, *Pom.*—Pure white Pompon. Sent out by Cannell. Sometimes known as Cooling's White; exquisite for bouquets and button-holes. Dwarf and of good free habit; may be had in bloom at Christmas under suitable culture; a little gem (E. J. Lowe)

SNOWFLAKE, *P.ear.*—Pure white (Salter)

SŒUR DOROTHÉE SOUILLE, *Jap.an.*—Very fine, ray florets lilac, with a high broad white disc

SŒUR MELANIE, *P.ear.*—White centre yellow, pure white in greenhouse. Very free and pretty like a small Elaine; one of the best

SOIRÉE D'ETE, *Pom.*—(Dél.)

SOL, *Jap.*—Clear citron-yellow, petals long and wax-like

SOLEIL BRILLIANT, *Pom.*—Violet, with white centre (Dél.)

SOLEIL D'OR, *Jap.*—Flowers enormous and very double; petals long and quilled, of a bright golden yellow with a purple tint; a most exquisite variety (Bouch.)

SOLEIL LEVANT, *Jap.*—Canary yellow, one of the best late blooming quilled varieties

SOURCE D'OR, *Jap.*—Golden twisted florets, tipped yellow, and shaded and dotted with orange (Pertuzés)

SOUVENIR D'AMÈLIE, *Jap.*—Pure white, pounced and shaded with rose-violet; pretty and distinct (Délaux)

SOUVENIR D'AMSTERDAM, *Jap.*—Rich brown or velvety crimson (Délaux, 1884)

SOUVENIR DE CAIRE, *Jap.*—Brownish violet, reverse golden (Délaux)

SOUVENIR DE HAARLEM.—Very double, florets long and twisted; colour violet-rose, gold reflex (Délaux)

SOUVENIR DE JERSEY, *Pom.*—Fine yellow or orange, with fringed edges. If disbudded it is a great beauty for late blooming

SOUVENIR DE L'ARDENE, *J.an.*—Ray florets lilac, disc pale lilac; good, bold flower

SOUVENIR DE MERCEDES, *Inc.*—Large imbricated, incurved; flower white, tinged with lilac (Lacroix)

SOUVENIR DE M. RAMPONT, *P.ear.*—Reddish crimson, good free habit

SOUVENIR DE REINE MARIE, *Jap.*—Very double large flower, magnificent rose-violet, enlivened with white, each petal framed by a small silvery white band; very pretty variety

SOUVENIR DU JAPON, *Jap.*—Rosy lilac, shaded chamois, centre golden (Délaux)

SOUVENIR D'UN AMI, *P.ear.*—White, changing to lilac-rose (Lebois)

SOUVENIR D'UN AMI, *L.fl.*—(Délaux)

SOUVENIR, *Inc.*—Orange-buff, fine incurved

SOUVENIR, *Pom.*—Golden yellow, bordered with crimson (Pert.)

SPARKLER, *Inc.*—Brassy amber or reddish, tipped bright orange (Smith)

SPLENDENS, *Jap.*—Chrome-yellow, late

SPORTSMAN, *P.ear.* — Lilac, shaded white

STAFFA, *L.fl.*—(Salter)

STAFFORD, *Inc.*— Rosy purple incurved

STAR, *Jap.*—Large orange-yellow

STAR, *Jap.*—Yellow and bronze, very late. See also Estella and Salter's Stella

STAR OF WHYKE, *Pom.* — A double Pompon, large and of snowy whiteness; very free and useful for cut bloom or decorative uses in pots. See *Jour. of Hort.*, 1883, p. 45, for woodcut figure

STELLA, *Pom.*—Golden orange tipped with chestnut. See Estella (Salter)

STELLARIS, *Inc.*—See Stellaris globosa

STELLARIS GLOBOSA, *Inc.*—Carmine-crimson and white, incurved; a fine show flower

STEVENS' NO. 1, *Inc.* — See George Stevens

ST. ANDREWS, *Inc.* — Orange-nankeen (Davis)

ST. BRIGID, *Pom.s.* — Snow-white, with a golden centre. It belongs to the single-flowered Pompon class, of which Mr. Teesdale has raised many showy varieties. (See *Florist*, Feb., 1884, pp. 21–22)

ST. CROUTS, *P.ear.*—White, tipped pink. Syns., Pollion, Saddington

ST. GEORGE, *Inc.*—Golden yellow (Clark)

ST. MARY, *P.ear.*—A good, free, and early blooming white Pompon (Cannell). Syns., Souvenir d'un Ami (Ware), Jardin des Plantes, white Madame Domage

ST. MICHAEL, *Pom.*—Bright yellow, very fine and free, brighter yellow than is even in Jardin des Plantes; one of the best for cut bloom

ST. PATRICK, *Inc.*—Ruby or bronzy red. See Beethoven, &c. (Davis)

STRIATA PERFECTA, *Jap.*—Flower very large and double, large petals like Striata, from which it is a sport, of a beautiful white, completely flamed and streaked with rose-violet; extra fine

STRIATA RUBRA, *Jap.*—Fine showy flower. See Rubra striata.

STRIATUM, *Jap.*—White, striped with rose

STRIPED QUEEN OF ENGLAND, *Inc.* — A sport from Queen, sometimes striped (Downie, Laird, and Laing)

ST. THAIS, *Pom.*—Bronze. More correctly, "Thais"

SULPHUREA SUPERBA, *Ref* —Clear sulphur-yellow

SULTANA, *Jap.*—Deep crimson

SULTAN, *Jap.*—Bright rosy purple, florets long and quilled

SUNFLOWER, *A.l.*—Very large sulphur, golden centre (Salter)

SUNSET, *Pom.* — Orange and bronze (Hayes)

SUPERBE, *L.fl.*—Tasselled blush

SURPRISE, *Jap.*—Flowers enormous, petals long and quilled, of comparatively exceptional size, fawn coloured, with a purplish tint, and large yellow centre; quite a new colour (Bonamy)

SURPRISE, *Pom.*—Florets fringed white below, rosy towards the tips (Délaux)

SYDENHAM, *Inc.*—Carmine-red

SYLPHIDE, *Inc.*—Delicate lilac and blush (Smith)

TALBOT, *Inc.* — Rose-purple, tipped blush (Smith)

TASSELLED YELLOW, *Jap.*—Golden yellow

TEMPLE DE SOLOMON.—Bright yellow

TENDRESSE, *Jap.*—(Délaux)

THAIS, *Pom.*—Bronze

THE COSSACK, *Jap.*—Chestnut-brown and yellow (Veitch)

THE CZAR, *Jap.*—Lemon-yellow. See Peter the Great (Major Carey)

THE DAIMIO, *Jap.*—Large twisted florets, orange and reddish crimson (Veitch)

THE GLOBE, *Inc.*—Blush. See Globe (Smith)

THE KHEDIVE, *Jap.*—Light purple, shaded lilac. See Khedive (Major Carey)

THE LITTLE GEM, *Pom.*—Peach blush. See P. Little Gem (Ingram)

THE MIKADO, *Jap.*—Yellow with crimson tint. See Mikado (Salter)

THEMIS, *Inc.*—Rose. See Anthemis

THÉRÈSE OLIVIER, *Jap.*—Yolk yellow (Lierval)

THERMOS, *L.*—Cinnamon brown, shaded with yellow (Bull)

THE SULTAN, *Jap.*—Brilliant purplish rose, reverse lighter. See Sultan

THETIS, *Pom.*—Clear yellow, double

THOMAS TODMAN, *Jap.*—Pale purple, thread-like florets (1883)

THUNBERG, *Jap.*—Very large, soft primrose-yellow (Veitch, 1882)

TIMBALE D'ARGENT, *L.fl.*—Large pure white (Pertuzés)

TIMOUR.—Canary-yellow (Bull)

TINTAMARRE, *Jap.*—Creamy white, washed and flamed with violet-carmine, petals frizzed, white behind (Délaux)

TISIPHONE, *Jap.s.*—A large actinioid flower, petals thread-like, furcate at the extremities, bright orange-red, reverse golden yellow (figured in *The Garden*)

TISSANDIER, *Pom.*—Flowers double, convexed and imbricated, colour deep rosy violet, tipped with pale yellow

TOKIO, *Jap.*—See To-Kio (Délaux)

TO-KIO, *Jap.*—Dwarf, mahogany velvety purple, reverse golden yellow (Délaux)

TOO-TOO, *Pom.s.*—Orange-red, with a bright yellow centre

TRAGÉDIE, *L.fl.*—Flowers large, full, imbricated, and of a rosy violet colour (Lemoine)

TRÉSORIER LACOSTE, *P.ear.*—Red shaded with orange; fine globular flower (Pertuzés)

TREVENNA, *Pom.*—See Golden, White, and Rose Trevenna

TRILBY, *Inc.*—Blush, white

TRILBY, GOLDEN, *Inc.*—See Golden Trilby

TRIOMPHE DE LA RUE DU CHATELET, *Jap.*—See Triomphe du Châtelet (Pertuzés)

TRIOMPHE DE SAINTE MARTIN, *Jap.*—Enormous flower, very double, outer petals very long, tubular at the base, but flattened like a spatula at the ends; centre petals shorter, flattened like a Pæony; ground colour silvery shining white, shaded and flamed with rose-violet; centre edged with rose-carmine, unique shape and quite new, a distinct variety from anything that has yet appeared, a most remarkable variety; it is a well-defined step in a new direction.

TRIOMPHE DU CHATELET, *Jap.*—Immense size, salmon colour, tinted rose, golden centre, florets twisted corkscrew fashion. See Triomphe de la Rue du Châtelet (Pertuzés)

TRIOMPHE DU NORD, *Ref.*—Large light red-chestnut, early, dwarf and free in habit

TROPHÉE, *Pom.*—See Trophy

TROPHY, *Pom.*—Rose mottled, good

TUBIFLORUM, *An.*—See *Harper's Magazine* for Nov., 1884, for a sketch of this variety

TURRIS EBURNIA, *Pom.* — White

TWO-COLOURED INCURVED, *Inc.*—Large orange and salmon

URANIE, *Pom.*—Rose-amaranth, pencilled with white, extra fine

URANUS.—Mottled rose, with light centre

VAL D'ANDORRE, *L.fl.*—Imbricated, colour red mixed with orange (Pertuzés)

VAL D'OR, *Pom.*—Jonquil yellow (Lacroix)

VALERIA, *L.fl.* — Cinnamon-orange, large; a fine conservatory plant

VALERIE.—See Valeria

VARIEGATED QUEEN OF ENGLAND, *Inc.*—Blush white, with variegated foliage

VENUS PINK or PEACH, *Inc.* —Good silvery rose or lilac, affording fine shapely blooms; very free (Salter)

VENUS, WHITE, *Inc.*—See White Venus (White)

VENUS, *Jap.*—Violet, reverse of florets silvery white, dwarf and good (1882). Venus is a sport from La Frisure

VERESCHAGINE, *L.fl.*—Rose-purple (Lemoine)

VERSAILLES DEFIANCE, *Inc.* —Bright rose-lilac (Smith)

VESTA, *Inc.*—Ivory white, good white, but of tender constitution and too apt to mildew

VICEROY OF EGYPT, *Jap.*— Deep rosy crimson, back of florets white, guard florets quilled, centre incurved

VICOMTESSE DE BELLEVILLE, *P.ear.*—Silvery rose, early

VICTOR HUGO, *Inc.*—Dark brown (Smith)

VICTOR LEMOINE, *L.fl.*—Red or amaranth, white reflex (De Reydellet)

VICTORIA, *Jap.* — Rose-pink florets, long, and edged with white, forming large showy tassels (Carey, 1882)

VILLE DE HYÈRES, *Jap.*— Brownish red in front, backs of florets yellow

VILLE DE TOULOUSE, *L.fl.*— Large, violet-amaranth, white reflex (Délaux)

VIOLA, LILAC, *Pom.* — See Viola

VIOLA, *Pom.*—Violet, lilac, or puce, free (Smith)

VIRGE ENFANTINE, *Pom.*— Very small, snow white, imbricated, good (Lebois)

VIRGILE, *L.fl.*—Golden buff, fine (Bonamy)

VIRGINAL, *P.ear.* — See Virginale

VIRGINALE, *P.ear.*—(Crozy)

VIRGINALE, *A.l.*—Pure white; a very dwarf late-flowering variety, florets finely fringed; well worth culture for Christmas blooming (J. Salter, 1870)

VIRGINIA, *P.ear.*—Best of early white kinds; pure white, free (Veitch)

VIRGINIE MIELLEZ, *Pom.*— Rose and carmine, very pretty

VIRGIN QUEEN, *Inc.*—Pure snow white (Smith)

VOLCAN, *Pom.*—(Délaux). See also Vulcan and Vulcain

VOLTAIRE, *Inc.*—Syn., Alix, which see

VOLUNTEER, *L.fl.*—(Salter)

VULCAIN, *Inc.* — Bright red-crimson, incurved; a fine show flower

VULCAN, *Inc.*—Bright red-crimson

WARDEN, *Inc.*—Orange (Smith)

WHITE AISLE, *Jap.*—Fine free blooming white, good and free for market work, or general decorative uses

WHITE CHRISTINE.—Creamy white (Simmonds)

WHITE COCKADE.—Milk white (Smith)

WHITE EVE, *Inc.*—Creamy white. Mr. Wyness, a zealous florist, for many years gardener to H.M. the Queen at Buckingham Palace, St. James's (Wyness)

WHITE GLOBE.—One of the best of whites, giving enormous solid blooms under good culture; creamy white (Salter)

WHITE LADY, *Pom.*—See Dame Blanche

WHITE PRINCESS, *Inc.*—White

WHITE QUEEN OF ENGLAND, *Inc.*—A sport of Queen of England, ivory white, incurved, very fine

WHITE ST. CROUTS, *P.ear.*—Good habit, one of the best of small early white varieties (Piercy)

WHITE SWAN, *Jap.*—White, tinted lilac

WHITE TREVENNA, *Pom.*—A fine white sport of Rose Trevenna (Mount)

WHITE VENUS, *Inc.*—Good free white; good late bloomer, red, tipped with yellow

WILLIAM BULL, *Jap.*—(Dél.)

WILLIAM EDWARD, *L.fl.*—Bright yellow

WILLIAM ROBINSON, *Jap.*—Large and fine, cinnamon and gold. Figured in *Garden* (1883)

WIZARD, *Jap.*—Bright reddish maroon, dwarf and free; good loose tasselled flowers (Salter)

WONDERFUL, *L.fl.*—Large crimson (Clark)

YAGO, *L.fl.*—Purple. See Iago (Salter)

YEDDO LILAC, *Jap.*—Rose-lilac, with lighter centre

YEDDO LILAC, *Pom.*—Large, pale lilac-purple (1883)

YELLOW DRAGON, *Jap.*—Canary yellow, twisted florets

YELLOW EARLY, *P.ear.*—See Golden Madame Domage

YELLOW FRINGE, *Jap.*—Golden yellow

YELLOW GEM, *Pom.s.*—Golden yellow with orange centre (Teesdale)

YELLOW KING, *Inc.*—Large yellow (Salter)

YELLOW PERFECTION, *Inc.*—Golden yellow (Clark)

Y. KANG KANG, *Jap.*—Flowers of semi-Japanese form, enormous and double, of a golden yellow washed with lilac; an extraordinary colour (Délaux)

YOKOHAMA ORANGE, *Jap.*—Good and showy, long-petalled flower (Carey)

ZELIA, *Jap.*—A pink and white Japanese sport of Hero of Magdala

ZEPHAR, *Inc.*—Salmon-red and yellow. Also called Zephyr

ZOBEIDE, *P.an.*—Light rose, very fine

ZYANETTA, *Pom.*—Rose-pink

CHRYSANTHEMUM SYNONYMS.

In order to mitigate as far as possible the difficulty attending the use of two or more names for the same variety, we publish the following list of synonyms. Some of these have arisen in one way and some in another, many by accident, others by design; but the vexation and disappointment caused by them are the same, and especially annoying to beginners in Chrysanthemum culture. The Horticultural Society of Chalons (France) has elected a special committee in order to arrange for an International Ballot for the best fifty varieties of Chrysanthemums. This will be instructive, as teaching us the kinds best esteemed in France, but an International Chrysanthemum Exhibition and Conference would teach us far more than anything else. Until quite recently Chrysanthemum growers in England had but little idea of the exertions made and the results gained by the French raisers; but this is now changed, and it is to be hoped that the French raisers will send their best seedlings to our London exhibitions, or place them before the National Chrysanthemum Society Committee, which has now the power to award medals and certificates as well as other prizes.

AIGLE D'OR, *syns.* Berrol and Hebden Bridge
ALBERT DE NURIOS, *syn.* Albert
ALBERT, *syn.* Albert de Nurios
ALBUM STRIATUM, *syn.* Striatum
ALDERLEY, *syn.* Mrs. Huffington
ANGELINA, *syn.* President Sanderson
AREGINA, *syn.* Inner Temple
AUGUSTINE GAUTHEUT, *syn.* Augustine
AUGUSTINE, *syn.* Augustine Gautheut
BARON BEUST, *syn.* Bernard Palissy
BEAUTÉ DU NORD, *syn.* Bixio
BEAUTY OF ST. JOHN'S WOOD, *syn.* Princess of Wales
BEETHOVEN, *syn.* St. Patrick
BENDIGO, *syn.* Mabel Ward
BERNARD PALISSY, *syn.* Baron Beust
BERROL, *syns.* Aigle d'Or, Drin Drin, and Hebden Bridge
BIXIO, *syn.* Beauté du Nord
BLANCHE FLEUR, *syn.* Bouquet National
BOB, *syn.* Maroon Model
BOULE D'ARGENT, *syn.* Silver Ball
BOUQUET NATIONAL, *syn.* Blanche Fleur
BRUCE FINDLAY, *syn.* Lord Alcester. Primrose sport from Empress of India
CANARY CHERUB, *syn.* Canary
CANARY, *syn.* Canary Cherub
CHINAMAN, *syn.* Le Chinois
CHRISTINE (WHITE), *syn.* Mrs. Forsyth
CHRISTMAS NUMBER, *syn.* Princess of Teck
CLAIRE ALOZIO, *syn.* Golden Mad. Domage
COMTE DE MORNY, *syn.* Purple Pompon